

## **AGENDA**

## **REGULAR MEETING**

\* \* \*

## **CLAYTON CITY COUNCIL**

\* \* \*

TUESDAY, March 3, 2020

7:00 P.M.

Hoyer Hall, Clayton Community Library 6125 Clayton Road, Clayton, CA 94517

Mayor: Julie K. Pierce Vice Mayor: Jeff Wan

## Council Members

Tuija Catalano Jim Diaz Carl Wolfe

- A complete packet of information containing staff reports and exhibits related to each public item is available for public review in City Hall located at 6000 Heritage Trail and on the City's Website at least 72 hours prior to the Council meeting.
- Agendas are posted at: 1) City Hall, 6000 Heritage Trail; 2) Library, 6125 Clayton Road; 3) Ohm's Bulletin Board, 1028 Diablo Street, Clayton; and 4) City Website at <u>www.ci.clayton.ca.us</u>
- Any writings or documents provided to a majority of the City Council after distribution of the Agenda Packet and regarding any public item on this Agenda will be made available for public inspection in the City Clerk's office located at 6000 Heritage Trail during normal business hours.
- If you have a physical impairment that requires special accommodations to participate, please call the City Clerk's office at least 72 hours in advance of the meeting at (925) 673-7304.

## \* CITY COUNCIL \*

## March 3, 2020

- 1. CALL TO ORDER AND ROLL CALL Mayor Pierce.
- 2. <u>PLEDGE OF ALLEGIANCE</u> led by Mayor Pierce.

### 3. CONSENT CALENDAR

Consent Calendar items are typically routine in nature and are considered for approval by one single motion of the City Council. Members of the Council, Audience, or Staff wishing an item removed from the Consent Calendar for purpose of public comment, question, discussion or alternative action may request so through the Mayor.

- (a) Approve the minutes of the City Council's regular meeting of February 18, 2020 and City Council's special meeting of February 19, 2020. (View Here)
- (b) Approve the Financial Demands and Obligations of the City. (View Here)
- **4. RECOGNITIONS AND PRESENTATIONS** None.

## 5. REPORTS

- (a) Planning Commission No meeting held.
- (b) Trails and Landscaping Committee No meeting held.
- (c) City Manager/Staff
- (d) City Council Reports from Council liaisons to Regional Committees, Commissions and Boards.
- (e) Other

## 6. PUBLIC COMMENT ON NON - AGENDA ITEMS

Members of the public may address the City Council on items within the Council's jurisdiction, (which are not on the agenda) at this time. To facilitate the recordation of comments, it is requested each speaker complete a speaker card available on the Lobby table and submit it in advance to the City Clerk. To assure an orderly meeting and an equal opportunity for everyone, each speaker is limited to 3 minutes, enforced at the Mayor's discretion. When one's name is called or you are recognized by the Mayor as wishing to speak, the speaker should approach the public podium and adhere to the time limit. In accordance with State Law, no action may take place on any item not appearing on the posted agenda. The Council may respond to statements made or questions asked, or may at its discretion request Staff to report back at a future meeting concerning the matter.

Public comment and input on Public Hearing, Action Items and other Agenda Items will be allowed when each item is considered by the City Council.

## 7. PUBLIC HEARINGS

- (a) Public Hearing to Consider Appeals of the Approval by the Planning Commission of an Infill Exemption in Accordance with the California Environmental Quality Act (CEQA) for The Olivia on Marsh Creek, an 81-Unit Senior Rental Housing Development (ENV-01-17), and an Appeal of the No Decision Action by the Planning Commission of the Affordable Housing Density Bonus Application, Site Plan Review Permit, and Tree Removal Permit (DBA-01-19, SPR-04-17, TRP-24-17). (View Here)
- **8. ACTION ITEMS** None.
- **9.** <u>COUNCIL ITEMS</u> limited to Council requests and directives for future meetings.
- **10.** CLOSED SESSION None.

## 11. ADJOURNMENT

The next regularly scheduled meeting of the City Council will be March 17, 2020.

# # # # #

## MINUTES

## OF THE REGULAR MEETING CLAYTON CITY COUNCIL

### TUESDAY, February 18, 2020

- 1. <u>CALL TO ORDER & ROLL CALL</u> The meeting was called to order at 7:00 p.m. by Mayor Pierce in Hoyer Hall, Clayton Community Library, 6125 Clayton Road, Clayton, CA. <u>Councilmembers present</u>: Mayor Pierce, Vice Mayor Wan and Councilmembers Catalano, Diaz and Wolfe. <u>Councilmembers absent</u>: None. <u>Staff present</u>: City Manager Ikani Taumoepeau, City Attorney Martin de los Angeles, City Engineer Scott Alman, Assistant to the City Manager Laura Hoffmeister, and City Clerk/HR Manager Janet Calderon.
- **2. PLEDGE OF ALLEGIANCE** led by Mayor Pierce.

## 3. CONSENT CALENDAR

It was moved by Councilmember Diaz, seconded by Vice Mayor Wan, to approve the Consent Calendar as submitted. (Passed; 5-0 vote).

- (a) Approved the minutes of the City Council's regular meeting of January 4, 2020.
- (b) Approved Financial Demands and Obligations of the City.
- (c) Adopted Resolution No. 02-2020 Accepting the Public Improvements Required by Conditions of Approval Parcel Map MS 01-15 Southbrook Lot Split and Release Guarantee Bonds Back to Developer and Accept 10% Maintenance Bond for the One-Year Maintenance Period.
- (d) Adopted Resolution No. 03-2020 Review of the City's Annual Report on Development Fees for the Fiscal Year Ending June 30, 2019 in Compliance with the Reporting Requirements of Section 66006 of the California Government Code (AB 1600).
- (e) Adopted Resolution No. 04-2020 Appointment of five (5) Citizens to the Trails and Landscaping Committee for terms of office commencing February 18, 2020 through December 31, 2021.
- **4. RECOGNITIONS AND PRESENTATIONS** None.

### 5. REPORTS

- (a) Planning Commission No meeting held.
- (b) Trails and Landscaping Committee No meeting held.
- (c) City Manager/Staff –

City Manager Taumoepeau advised after his conversation with State Parks, the City will be submitting applications for two possible grants 1. Approximately \$200,000.00 for the Per Capita State Park Grant, and 2. Approximately \$250,000.00 for the Revenue Enhancement Grant Program (RIRE).

Vice Mayor Wan inquired on the basis of the grants.

City Manager Taumoepeau advised the Per Capita Grant Program is awarded based on population and initiated by submit a letter of interest. Agencies are eligible for the Revenue Enhancement Program if the city raises funds through taxes to enhance parks. Eligibility will also be scrutinized depending on text used in the tax measure.

(d) City Council - Reports from Council liaisons to Regional Committees, Commissions and Boards.

Councilmember Catalano indicated "no report".

Vice Mayor Wan indicated "no report".

Councilmember Wolfe attended the Mayors' Conference in Pittsburg, met with the City Manager, met constituents, and prepared for the Strategic Goal Setting Session.

Councilmember Diaz announced the loss of Carmen Williams a member of the family that owned Village Market, and Retired Clayton Sergeant Tim O'Hara; requesting the meeting be adjourned in their memory this evening. Councilmember Diaz attended the Clayton Historical Society Camellia Tea, the 54<sup>th</sup> Academy Graduation of Contra Costa County Fire Protection District, met with the City Manager, and prepared for the Strategic Goal Setting Session.

Mayor Pierce attended the Regional Planning Committee of the Association of Bay Area Governments meeting, the Administration and Planning Committee meeting of Contra Costa Transportation Authority, met with Doug Moore one the owners of Oakhurst Country Club noting Clayton will be hosting the April Mayors Conference at Oakhurst, attended the Mayors' Conference in Pittsburg, and attended the Association of Bay Area Governments General Assembly meeting.

City Manager Taumoepeau also acknowledged the newly appointed Trails and Landscape Committee members in attendance this evening Trisha Brown and Karen Case.

- (e) Other None.
- 6. **PUBLIC COMMENT ON NON AGENDA ITEMS None.**
- 7. <u>PUBLIC HEARINGS</u> None.

### 8. ACTION ITEMS

(a) Receive Updated Information Regarding Pedestrian Safety Improvements Near Mount Diablo Elementary School and Diablo View Middle School and Provide Direction to Staff.

City Engineer Scott Alman presented the report.

Following questions by the Council, Mayor Pierce opened matter for public comments.

Rebecca Nolan expressed her support for advanced warning red flashing lights and additional signage in the westbound direction. She also hopes for quick installation.

Dan Hummer also expressed support and suggested an installation in the median and also inquired if there is a rent-to-own option for the signage at Pine Hollow Road and Mitchell Canyon Road to test its effectiveness.

Mayor Pierce closed public comment.

Direction was provided to staff to gather additional information on the cost associated to install signage in west bound direction at Diablo View Middle School including an option for median installation, signage at all four corners at Pine Hollow Road and Mitchell Canyon Road, and Mayor Pierce provided notice to the City Engineer about a sink hole prior to the stop sign located on Mitchell Canyon Road.

(b) Adopt Resolution Establishing a New Utility Underground District 2020-01 Along Marsh Creek Road for the Purposes of Documents Activity Within the Pacific Gas & Electric Co. (P.G.&.E) Rule 20-A Program to Preserve the City's Rule 20-A Program Allocations from Being Diverted to Other Jurisdictions.

City Engineer Scott Alman presented the report.

Sindy Mikkelsen Harris and Associates, clarified additional information regarding the current and proposed 20-A elimination and addition of 20-B, 20-C & 20-D Program Allocation instead of project credits a grant will be provided.

Following questions by the Council, Mayor Pierce opened the item to public comment.

Dan Hummer inquired on the time frame when PG&E can begin the project and the timeline for its expected completion.

Mayor Pierce closed public comment.

It was moved by Councilmember Diaz, seconded by Vice Mayor Wan to adopt Resolution No. 05-2020 Establishing Underground Utility District 2020-01 Located Along Marsh Creek Road Between High Street and El Molino. (Passed 5-0 vote).

(c) Discuss and Consider Adopting a Resolution Affirming and Clarifying the Duties and Responsibilities of the "Trails and Landscape Committee" which serves as the Citizens Oversight Committee for the Citywide Landscape Maintenance District CFD 2007-1.

Assistant to the City Manager Laura Hoffmeister presented the report.

Following questions by the Council, Mayor Pierce opened matter for public comments; no comments were offered.

Mayor Pierce suggested Vice Mayor Wan and Councilmember Catalano the Trails and Landscaping Committee Liaisons work with staff to clarify wording and bring ideas to enhance the committee. Mayor Pierce requested this item be brought back to the March 17, 2020 City Council meeting.

Direction was provided to staff.

## 9. COUNCIL ITEMS

Councilmember Catalano requested information regarding the recently received Cemex Newsletter.

Assistant to the City Manager Laura Hoffmeister advised the newsletter contains information on changes to the Reclamation Plan where the application was determined incomplete. A revised Reclamation Plan was submitted to the County who will be holding scoping meetings to find out about the Environmental Impact Report to the revision.

Mayor Pierce suggested receiving updates from the Contra Costa County and Quarry.

- **10.** CLOSED SESSION None.
- 11. <u>ADJOURNMENT</u>— on call by Mayor Pierce, the City Council adjourned its meeting at 8:59 p.m. in memory of Carmen Williams longtime Clayton community member who ran the Village Market and was involved with many clubs and activities in Clayton, and Tim O'Hara, former Clayton Police Sergeant who took an interest in the youth in the community by assisting with sports through the local church, both passed away recently.

The next regularly scheduled meeting of the City Council will be March 3, 2020.

	# # # # #
Respectfully submitted,	
Janet Calderon, City Clerk	
	APPROVED BY THE CLAYTON CITY COUNCI
	Julie Pierce, Mayor

# # # # #

City Council Minutes February 18, 2020 Page 4

## MINUTES

# OF THE SPECIAL MEETING CLAYTON CITY COUNCIL

### TUESDAY, February 19, 2020

1. <u>CALL TO ORDER & ROLL CALL</u> – The meeting was called to order at 8:04 a.m. by Mayor Pierce in Hoyer Hall, Clayton Community Library, 6125 Clayton Road, Clayton, CA. <u>Councilmembers present</u>: Mayor Pierce, Vice Mayor Wan, Councilmembers Catalano, Diaz, and Wolfe. <u>Councilmembers absent</u>: None. <u>Staff present</u>: City Manager Ikani Taumoepeau, Assistant to the City Manager Laura Hoffmeister, Maintenance Supervisor Jim Warburton, City Engineer Scott Alman, and City Clerk/Human Resources Manager Janet Calderon.

### 2. PUBLIC COMMENTS

Kanni Horton would like to see the residents talk more nicely to one another by listening and coming to solutions. She also expressed concerns regarding the Olivia Project suggesting it be built in another location that would accommodate 100 vehicles and be safe.

Dee Vieira requested the City Council consider adopting a Resolution recognizing June as Pride Month for the LGBQT community and flying the Pride Flag on City property providing a sense of safety.

Ann Stanaway expressed her concerns of public safety and parking problems for emergency vehicle clearance. She also spoke about First Amendment Rights.

## 3. ACTION ITEM

Discussion and establishment of Council – Manager Goals and Objectives for Calendar Year 2020.

The City Manager provided an overview of the process of the Goal-Setting workshop. The City Council was provided a ranking sheet for the thirty four (34) goals they provided to the City Manager for Council consideration.

After considerable discussion and exchange of ideas, the City Council provided their votes to the City Manager for tally of major City goals, important goals to achieve, goals to defer to subsequent years, and 'not a priority' goals. The results of major City goals by average are:

- Determine Land-Use for City property behind Clayton Community Church, reconfigure boundaries and rezone Downtown for proper usage, TCSP update subject to funding availability and Council review of the update process and methods. [Not to be combined with other plans, e.g. with GP update]
- Create a 5 Year Fiscal Forecast/Budget (for all funds)
- Upgrade IT hardware and software in an integrated plan for implementation to enhance staff productivity.
- Develop multi-year budget plans for TLC, Community Park Improvements, Grove Park improvements
- Enhance Emergency Preparedness ahead of natural disasters and Public Safety Power Shut-Offs

- Ensure compliance with applicable State and other laws, including timely submittal/completion of required reports and submittals that are due to regional of State agencies
- Digitizing/archival of records and documentation
- Enhance recruitment & retention efforts
- Explore possible swim center partnership with CVCHS (at 4<sup>th</sup> playfield adjacent location)

City Manager Ikani Taumoepeau advised staff will still work on the previous *Staff Work in Progress* with the understanding those items require budget.

Vice Mayor Wan inquired on how the items will be measured for progress including details on the steps of achievement including a column of comments.

Councilmember Catalano expressed concerns of keeping up with maintaining current City services. She also suggested this document once cleaned up should be posted to the City's website.

Mayor Pierce suggested a sub-committee of herself and Vice Mayor Wan to review the document prior to it being published on the City's website.

Assistant to the City Manager Laura Hoffmeister also expressed to the City Council staffing shortages in the Community Development and Finance Departments.

City Manager Taumoepeau noted the exercise today is intended for FY 2020-21 and thanked staff and Council for participating.

Mayor Pierce suggested the idea of specified study sessions to take place on off-weeks of regular City Council meetings with focus on a specific topic.

**5. ADJOURNMENT**— on call by Mayor Pierce the meeting adjourned at 10:00 a.m.

	# # # # #
Respectfully submitted,	
Janet Calderon, City Clerk	
	APPROVED BY CLAYTON CITY COUNCIL
	Julie Pierce, Mayor
	# # # # #



## STAFF REPORT

TO: HONORABLE MAYOR AND COUNCILMEMBERS

FROM: JENNIFER GIANTVALLEY, ACCOUNTING TECHNICIAN

DATE: 03/03/2020

SUBJECT: APPROVE FINANCIAL DEMANDS AND OBLIGATIONS

## **RECOMMENDATION:**

It is recommended the City Council, by minute motion, approve the financial demands and obligations of the City for the purchase of services and goods in the ordinary course of operations.

Attached Report	Purpose	Date	Amo	unt
Open Invoice Report	Accounts Payable	2/25/2020	\$	158,584.64
Cash Requirements Report	Payroll, Taxes	2/26/2020		80,941.09
Invoice paid prior to meeting	Keller House Roof	2/21/2020		6,950.00
	Total R	Total Required		

#### Attachments:

- 1. Open Invoice Report, dated 2/25/20 (4 pages)
- 2. Cash Requirements report PPE 2/23/20 (3 pages)
- 3. Airtight Construction check req./copy of check (2 pages)

# City of Clayton Open Invoice Report

Vendor Name	Due Date	Invoice Date	Invoice Number	Invoice Description	Invoice Balance		Discount Expires On	Net Amount Due
All City Management Services, Inc.								
All City Management Services, Inc.	2/12/2020	2/12/2020	66766	School crossing guard svcs 1/26/20-2/8/20	\$1,317.60	\$0.00		\$1,317.60
				Totals for All City Management Services, Inc.	\$1,317.60	\$0.00		\$1,317.60
Josefina Alvarez								
Josefina Alvarez	2/24/2020	2/24/2020	022220	Deposit refund	\$200.00	\$0.00		\$200.00
				Totals for Josefina Alvarez	\$200.00	\$0.00		\$200.00
American Fidelity Assurance Company	У							
American Fidelity Assurance Company	2/26/2020	2/21/2020	2062919	FSA PPE 2/23/20	\$83.07	\$0.00		\$83.07
American Fidelity Assurance Company	2/29/2020	2/29/2020	D119425	Supplemental benefits for February 2020	\$583.34	\$0.00		\$583.34
				Totals for American Fidelity Assurance Company	\$666.41	\$0.00		\$666.41
AT&T (CalNet3)								
AT&T (CalNet3)	2/22/2020	2/22/2020	14362873	Phones 1/22/20-2/21/20	\$1,204.07	\$0.00		\$1,204.07
				Totals for AT&T (CalNet3)	\$1,204.07	\$0.00		\$1,204.07
Bassam Atwal								
Bassam Atwal	2/20/2020	2/20/2020	BP07-20	Deposit refund	\$1,000.00	\$0.00		\$1,000.00
				Totals for Bassam Atwal	\$1,000.00	\$0.00		\$1,000.00
Best Best & Kreiger LLP								
Best Best & Kreiger LLP	2/10/2020	2/10/2020	869528	Suppl. Legal services January 2020	\$2,470.20	\$0.00		\$2,470.20
Best Best & Kreiger LLP	2/10/2020	2/10/2020	869526	Legal services January 2020	\$9,470.00	\$0.00		\$9,470.00
Best Best & Kreiger LLP	2/10/2020	2/10/2020	869527	Suppl Legal services January 2020	\$2,528.00	\$0.00		\$2,528.00
				Totals for Best Best & Kreiger LLP	\$14,468.20	\$0.00		\$14,468.20
CalPERS Health								
CalPERS Health	3/9/2020	2/14/2020	15957263	Medical March 2020	\$35,542.55	\$0.00		\$35,542.55
				Totals for CalPERS Health	\$35,542.55	\$0.00		\$35,542.55
CalPERS Retirement								
CalPERS Retirement	2/25/2020	2/24/2020	022320	Retirement PPE 2/23/20	\$16,124.34	\$0.00		\$16,124.34
				Totals for CalPERS Retirement	\$16,124.34	\$0.00		\$16,124.34
CCWD								
CCWD	2/5/2020	2/5/2020	H Series	Water svcs 12/5/19-2/3/20	\$5,647.42	\$0.00		\$5,647.42
				Totals for CCWD.	\$5,647.42	\$0.00		\$5,647.42
Cintas Corporation								
Cintas Corporation	2/20/2020	2/20/2020	4043225567	PW uniforms through 2/20/20	\$48.88	\$0.00		\$48.88
				Totals for Cintas Corporation	\$48.88	\$0.00		\$48.88
CME Lighting Supply, Inc								
CME Lighting Supply, Inc	2/7/2020	2/7/2020	237806	Light bulbs, sockets	\$116.99	\$0.00		\$116.99

## Open Invoice Report

Vendor Name	Due Date	Invoice Date	Invoice Number	Invoice Description	Invoice Balance		Discount Expires On	Net Amount Due
				Totals for CME Lighting Supply, Inc	\$116.99	\$0.00		\$116.99
Contra Costa Tractor Mobile Svc								
Contra Costa Tractor Mobile Svc	2/6/2020	2/6/2020	18231	Service call Skidster 210	\$640.43	\$0.00		\$640.43
				Totals for Contra Costa Tractor Mobile Svc	\$640.43	\$0.00		\$640.43
Dillon Electric Inc								
Dillon Electric Inc	2/10/2020	2/10/2020	4092	Street light repair 2/10/20	\$612.26	\$0.00		\$612.26
				Totals for Dillon Electric Inc	\$612.26	\$0.00		\$612.26
Environtech Enterprises								
Environtech Enterprises	2/1/2020	2/1/2020	A001-B1-20	Weed abatement January 2020	\$15,000.00	\$0.00		\$15,000.00
				Totals for Environtech Enterprises	\$15,000.00	\$0.00		\$15,000.00
Globalstar LLC								
Globalstar LLC	2/16/2020	2/16/2020	11006087	Sat phone PD 1/16/20-2/15/20	\$107.12	\$0.00		\$107.12
				Totals for Globalstar LLC	\$107.12	\$0.00		\$107.12
Graybar Electric Co, Inc								
Graybar Electric Co, Inc	2/7/2020	2/7/2020	9314488705	LED lights for Corp Yard	\$286.79	\$0.00		\$286.79
				Totals for Graybar Electric Co, Inc	\$286.79	\$0.00		\$286.79
Harris & Associates, Inc.								
Harris & Associates, Inc.	1/28/2020	1/28/2020	43618	Engineering svcs 11/24/19-12/28/19	\$9,863.00	\$0.00		\$9,863.00
				Totals for Harris & Associates, Inc.	\$9,863.00	\$0.00		\$9,863.00
Health Care Dental Trust								
Health Care Dental Trust	2/14/2020	2/14/2020	274330	Dental March 2020	\$2,163.51	\$0.00		\$2,163.51
				Totals for Health Care Dental Trust	\$2,163.51	\$0.00		\$2,163.51
ICMA Retirement Corporation								
ICMA Retirement Corporation	2/26/2020	2/24/2020	022320	457 plan contributions PPE 2/23/20	\$1,300.00	\$0.00		\$1,300.00
				Totals for ICMA Retirement Corporation	\$1,300.00	\$0.00		\$1,300.00
J&R Floor Services			T. 2020	V				
J&R Floor Services	2/29/2020	2/29/2020	Two2020	Janitorial services February 2020	\$4,912.81	\$0.00		\$4,912.81
				Totals for J&R Floor Services	\$4,912.81	\$0.00		\$4,912.81
LarryLogic Productions			1051	G: 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4				
LarryLogic Productions	2/19/2020	2/19/2020	1871	City council meeting production 2/18/20	\$420.00	\$0.00		\$420.00
				Totals for LarryLogic Productions	\$420.00	\$0.00		\$420.00
Main Fire Protection Inc.	2/12/2222	2/12/2020	02226	EII liitahan haad aamiisa	ФС 10 02	40.00		#2.10.0 <del>2</del>
Main Fire Protection Inc.	2/12/2020	2/12/2020	93326	EH kitchen hood service	\$249.82	\$0.00		\$249.82
				Totals for Main Fire Protection Inc.	\$249.82	\$0.00		\$249.82

# City of Clayton Open Invoice Report

Vendor Name	Due Date	Invoice Date	Invoice Number	Invoice Description	Invoice Balance		Discount Expires On	Net Amount Due
Fred Maldonado								
Fred Maldonado	2/14/2020	2/14/2020	CAP0357	Refund of cancelled project	\$2,983.00	\$0.00		\$2,983.00
				Totals for Fred Maldonado	\$2,983.00	\$0.00		\$2,983.00
Martell Water Systems, Inc.								
Martell Water Systems, Inc.	2/18/2020	2/18/2020	27121	Repair well pump @ Westwood Park	\$2,443.67	\$0.00		\$2,443.67
				Totals for Martell Water Systems, Inc.	\$2,443.67	\$0.00		\$2,443.67
Nationwide								
Nationwide	2/26/2020	2/24/2020	022320	457 plan contribution PPE 2/23/20	\$500.00	\$0.00		\$500.00
				Totals for Nationwide	\$500.00	\$0.00		\$500.00
Paychex								
Paychex	2/26/2020	2/26/2020	2020022402	Payroll fee PPE 2/23/20	\$103.04	\$0.00		\$103.04
Paychex	2/26/2020	2/26/2020	2020022401	Payroll fees PPE 2/23/20	\$194.69	\$0.00		\$194.69
				Totals for Paychex.	\$297.73	\$0.00		\$297.73
PG&E								
PG&E	3/2/2020	2/14/2020	021420	Energy 1/15/20-2/13/20	\$21,236.66	\$0.00		\$21,236.66
PG&E	2/21/2020	2/21/2020	022120	Energy 1/22/20-2/21/20	\$4,092.23	\$0.00		\$4,092.23
				Totals for PG&E	\$25,328.89	\$0.00		\$25,328.89
Raney Planning & Management, Inc.								
Raney Planning & Management, Inc.	2/11/2020	2/11/2020	1836E-8	Prep/Attend appeal hearing 2/4/20	\$1,293.40	\$0.00		\$1,293.40
				Totals for Raney Planning & Management, Inc.	\$1,293.40	\$0.00		\$1,293.40
Riso Products of Sacramento								
Riso Products of Sacramento	2/19/2020	2/19/2020	205228	Copier usage 1/20/20-2/19/20	\$71.89	\$0.00		\$71.89
				Totals for Riso Products of Sacramento	\$71.89	\$0.00		\$71.89
Stanley Access Tech Inc								
Stanley Access Tech Inc	2/1/2020	2/1/2020	0905862424	Service call Library entrance doors	\$3,493.82	\$0.00		\$3,493.82
				Totals for Stanley Access Tech Inc	\$3,493.82	\$0.00		\$3,493.82
Verizon Wireless								
Verizon Wireless	2/1/2020	2/1/2020	9847430283	Cell phones 1/2/20-2/1/20	\$234.73	\$0.00		\$234.73
				Totals for Verizon Wireless	\$234.73	\$0.00		\$234.73
Waraner Brothers Tree Service								
Waraner Brothers Tree Service	2/7/2020	2/7/2020	15092	Tree work-Street clearance throughout city	\$8,700.00	\$0.00		\$8,700.00
				Totals for Waraner Brothers Tree Service	\$8,700.00	\$0.00		\$8,700.00
Western Exterminator						,		, .,
Western Exterminator	1/31/2020	1/31/2020	7759264	Pest control January 2020	\$427.00	\$0.00		\$427.00
				Totals for Western Exterminator	\$427.00	\$0.00		\$427.00
				Totalo for Western Externimator	φ <del>1</del> 27.00	φυ.υυ		φ+27.00

# City of Clayton Open Invoice Report

Vendor Name	Due Date	Invoice Date	Invoice Number	Invoice Description	Invoice Balance		Discount Expires On	Net Amount Due
Workers.com								
Workers.com	2/14/2020	2/14/2020	127118	Seasonal worker week end 2/9/20	\$861.00	\$0.00		\$861.00
				Totals for Workers.com	\$861.00	\$0.00		\$861.00
Zee Medical Company								
Zee Medical Company	2/11/2020	2/11/2020	724605716	Organize, restock first aid cabinet	\$57.31	\$0.00		\$57.31
				Totals for Zee Medical Company	\$57.31	\$0.00		\$57.31
				GRAND TOTALS:	\$158,584.64	\$0.00		\$158,584.64

#### 0088 1307-5283 City of Clayton

## **CASH REQUIREMENTS**

CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR ELECTRONIC FUNDS TRANSFERS (EFT) FOR CHECK DATE 02/26/20: \$79,919.35

#### TRANSACTION SUMMARY

SUMMARY BY TRANSACTION TYPE -

TOTAL ELECTRONIC FUNDS TRANSFER (EFT)
CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR EFT
TOTAL REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES
CASH REQUIRED FOR CHECK DATE 02/26/20

79,919.35 **79,919.35** 11,945.71 91,865.06

#### TRANSACTION DETAIL

ELECTRONIC FUNDS TRANSFER - Your financial institution will initiate transfer to Paychex at or after 12:01 A.M. on transaction date.

TRANS, DATE	BANK NAME	ACCOUNT NUMBER	PRODUCT	DESCRIPTION		BANK DRAFT AMOUNTS  & OTHER TOTALS
02/25/20	BANK OF AMERICA, NA	xxxxxx4799	Direct Deposit	Net Pay Allocations	61,563.72	& OTHER TOTALS
02/25/20	BANK OF AMERICA, NA	xxxxxx4799	Direct Deposit	Deductions with Direct Deposit	603.50	62,167.22
02/25/20	BANK OF AMERICA, NA	xxxxxx4799	Readychex®	Check Amounts	1,762.84	1,762.84
02/25/20	BANK OF AMERICA, NA	xxxxxx4799	Garnishment	Employee Deductions	75.00	75.00
					EFT FOR 02/25/20	64,005.06
02/26/20	BANK OF AMERICA, NA	xxxxxx4799	Taxpay®	Employee Withholdings Social Security Medicare Fed Income Tax CA Income Tax Total Withholdings	45.75 1,256.23 9,349.38 3,691.69 14,343.05	
				Employer Liabilities Social Security Medicare Fed Unemploy CA Unemploy CA Emp Train Total Liabilities	45.74 1,256.24 42.52 219.66 7.08 <b>1,571.24</b>	15,914.29
					EFT FOR 02/26/20	15,914.29
					TOTAL EFT	79,919.35

## **CASH REQUIREMENTS**

CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR ELECTRONIC FUNDS TRANSFERS (EFT) FOR CHECK DATE 02/26/20: \$-4,686.56

RANSACTION SUMMARY		
SUMMARY BY TRANSACTION TYPE -	TOTAL ELECTRONIC FUNDS TRANSFER (EFT)	-4,686.56
	CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR EFT	-4,686.56
	TOTAL VOIDS	-1,570.53
	CASH REQUIRED BEFORE REMAINING D / W / L	-6,257.09
	TOTAL REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES	-1,684.39
	CASH REQUIRED FOR CHECK DATE 02/26/20	-7,941.48

### TRANSACTION DETAIL

ELECTRONIC FUNDS TRANSFER - Your financial institution will initiate transfer to Paychex at or after 12:01 A.M. on transaction date.

TRANS. DATE 02/26/20	BANK NAME BANK OF AMERICA, NA	ACCOUNT NUMBER xxxxxx4799	PRODUCT Direct Deposit	<b>DESCRIPTION</b> Net Pay Allocations	-3,214.48	BANK DRAFT AMOUNTS <u>&amp; OTHER TOTALS</u> -3,214.48
02/26/20	BANK OF AMERICA, NA	xxxxxx4799	Taxpay®	Employee Withholdings Medicare Fed Income Tax CA Income Tax Total Withholdings  Employer Liabilities Medicare Fed Unemploy CA Unemploy CA Emp Train Total Liabilities	-111.17 -852.43 -337.88 -1,301.48 -111.18 -9.38 -48.48 -1.56 -170.60	-1,472.08
					EFT FOR 02/26/20	-4,686.56
					TOTAL EFT	-4,686.56
VOIDS - Refer to your parts of the second se	payroll journal for more information  BANK NAME  Refer to your records for accou	ACCOUNT NUMBER	<i>product</i> Payroll	DESCRIPTION  Voided Check Amounts  Readychex #6275200075  Readychex  Voided Tra	-1,570.53 -1,570.53 nsactions Subtotal TOTAL VOIDS	<u>TOTAL</u> -1,570.53 -1,570.53

## **CASH REQUIREMENTS**

CASH REQUIRED FOR NEGOTIABLE CHECKS &/OR ELECTRONIC FUNDS TRANSFERS (EFT) FOR CHECK DATE 02/26/20: \$5,708.30

	TOTAL ELECTRONIC FUNDS CASH REQUIRED FOR NE TOTAL REMAINING DEDUCT CASH REQUIRED FOR CH institution will initiate transfer to  ACCOUNT NUMBER XXXXXX4799  XXXXXXX4799	EGOTIABLE CHECKS ( IONS / WITHHOLDING IECK DATE 02/26/20	S / LIABILITIES	5,708.30 5,708.30 2,024.33 7,732.63	BANK DRAFT AMOUNTS & OTHER TOTAL
I <b>AME</b> IF AMERICA, NA	ACCOUNT NUMBER xxxxxx4799	PRODUCT	DESCRIPTION	2,008,22	& OTHER TOTAL
I <b>AME</b> IF AMERICA, NA	ACCOUNT NUMBER xxxxxx4799	PRODUCT	DESCRIPTION	2,008,22	& OTHER TOTAL
F AMERICA, NA	xxxxxx4799			2 008 22	& OTHER TOTAL
F AMERICA, NA	xxxxxx4799			3 008 33	
F AMERICA, NA	xxxxxx4799		NEL Fay Allocations	3,090.32	3,098.32
	75000001100	Readychex®	Check Amounts	1,273.56	1,273.56
				EFT FOR 02/25/20	4,371.88
F AMERICA, NA	xxxxxx4799	Taxpay®	Employee Withholdings Medicare Fed Income Tax CA Income Tax Total Withholdings	108.19 765.20 295.42 <b>1,168.81</b>	
			Employer Liabilities Medicare Fed Unemploy CA Unemploy CA Emp Train	108.19 9.38 48.48 1.56	1,336.4
			Total Liabilities		1,336.4
					5,708.3
	<u>AME</u>	•	AME ACCOUNT NUMBER PRODUCT	CA Income Tax Total Withholdings Employer Liabilities Medicare Fed Unemploy CA Unemploy CA Emp Train Total Liabilities  Thiolings / Liabilities - Paychex does not remit these funds. You must ensure accurate and timely pages.	CA Income Tax 295.42 Total Withholdings 1,168.81  Employer Liabilities Medicare 108.19 Fed Unemploy 9.38 CA Unemploy 48.48 CA Emp Train 1.56 Total Liabilities 167.61  EFT FOR 02/26/20  TOTAL EFT  THHOLDINGS / LIABILITIES - Paychex does not remit these funds. You must ensure accurate and timely payment of applicable items.  AME ACCOUNT NUMBER PRODUCT Payroll Employee Deductions 1959 Surv. Ben. 0.93

2,024.33

TOTAL REMAINING DEDUCTIONS / WITHHOLDINGS / LIABILITIES

## CITY OF CLAYTON CHECK REQUEST

Vendor Number:	Vendor Name:								
3931	Airtight Constr	Airtight Construction							
Invoice Number:	Address:								
40749-1	19-1 P O Box 6536, Concord, CA 94524								
Invoice Date	02/21/20								
Desc	ription	Amount	Charge to Account						
	r Keller House roof	\$ 6,950.00	101-7341-03						
	M.Ze.								
	THE WAR								
	Total:	\$ 6,950.00	<u> </u>						
Comments:									
Change orders incre	eased amount due to \$29,02	21.20. The City is payir	ng initial invoice amount pending						
	documentation from v	vendor for the change o	orders.						
	1								
Department Approval			Date 2/21/20.						
City Manager Approx	al		Date						

To:

Airtight Construction, Inc

Vendor ID: 3931

2/21/2020

40749-1

1/9/2020

Keller House roof work

Totals:

\$6,950.00 **\$6,950.00**  \$0.00 **\$0.00**  \$6,950.00 **\$6,950.00** 

To:

Airtight Construction, Inc

2/21/2020

Vendor ID:

3931

40749-1

1/9/2020

Keller House roof work

Totals:

\$6,950.00 **\$6,950.00**  \$0.00 **\$0.00**  \$6,950.00 **\$6,950.00** 

2/21/2020

35555

\*\*Six thousand nine hundred fifty and 00/100 Dollars\*\*

\$\*\* 6,950.00



# **AGENDA REPORT**

TO: HONORABLE MAYOR AND COUNCIL MEMBERS

FROM: DANA AYERS, INTERIM COMMUNITY DEVELOPMENT DIRECTOR

**DATE:** MARCH 3, 2020

SUBJECT: PUBLIC HEARING TO CONSIDER APPEALS OF THE APPROVAL BY THE

PLANNING COMMISSION OF AN INFILL EXEMPTION IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) FOR THE OLIVIA ON MARSH CREEK, AN 81-UNIT SENIOR RENTAL HOUSING DEVELOPMENT (ENV-01-17), AND AN APPEAL OF THE NO DECISION ACTION BY THE PLANNING COMMISSION OF THE AFFORDABLE HOUSING DENSITY BONUS APPLICATION, SITE PLAN REVIEW PERMIT,

AND TREE REMOVAL PERMIT (DBA-01-19, SPR-04-17, TRP-24-17)

## RECOMMENDATION

Staff recommends that the City Council take the following actions:

- Adopt the proposed Resolution denying the appeals and upholding the Planning Commission's approval of the Infill Exemption pursuant to California Environmental Quality Act Guidelines section 15332; and
- Adopt the proposed Resolution approving the Affordable Housing Density Bonus Application, Site Plan Review Permit, and Tree Removal Permit.

### **BACKGROUND**

On February 4, 2020, the City Council considered four appeals of the Planning Commission's actions of December 10, 2019 on The Olivia on Marsh Creek ("The Olivia") project proposal. The Planning Commission's actions included approval of a Categorical Exemption pursuant to the California Environmental Quality Act (CEQA) under CEQA Guidelines section 15332 (Class 32 – Infill Development Projects), and a "No Decision" action on the planning entitlements for the project (Affordable Housing Density Bonus Application, Site Plan Review Permit, and Tree Removal Permit). At the February 4 hearing, the City Council heard from the three parties who filed appeals on the approval of the CEQA

Infill Exemption, as well as from the applicant, William Jordan, who filed an appeal on the Planning Commission's "No Decision" action for the project entitlement requests. The Council continued the public hearing to March 3, 2020, and directed staff to provide clarifications and additional information on several topics relevant to the proposed project.

Mr. Jordan filed the application with the City for The Olivia project on September 6, 2017. The project is a proposed multi-family residential development project at the corner of High Street and Marsh Creek Road on three separate parcels: 6170 High Street, 6450 Marsh Creek Road, and 6490 Marsh Creek Road (see Attachment A: Vicinity Map). The application included a request for the granting of a density bonus pursuant to the State's Density Bonus Law (California Government Code sections 65915 to 65918) and the City's Affordable Housing Density Bonus Requirements Ordinance (Chapter 17.90 of the Clayton Municipal Code [CMC]). The proposed development would consist of rental units and would be rented to residents age 55 and older. The project includes seven affordable units designated for Very Low-Income households as defined by the U.S. Department of Housing and Urban Development (HUD).

On November 12, 2019, the Planning Commission held a public hearing to consider the applicant's request for planning entitlements and an exemption from CEQA (Public Resources Code section 21000 *et seq.*) for The Olivia on Marsh Creek project. At that meeting, the project was introduced, followed by questions, discussion and comments from the Planning Commission and members of the public. The item was then continued to the December 10, 2019, Planning Commission meeting to allow staff to gather further information in response to questions raised at the November 12 hearing and to allow additional time for public comment. See Planning Commission Staff Reports from November 12 and December 10, online via the links provided in Attachment D to this Staff Report, for further background and discussion.

At the December 10 meeting, the Planning Commission approved by a 3-1 vote a motion to adopt a resolution determining that The Olivia project qualifies for an exemption from CEQA pursuant to section 15332 (Categorical Exemption Class 32, Infill Development Projects) of the CEQA Guidelines (California Code of Regulations section 15000 *et seq.*) On the same date, the Planning Commission voted 2-2 on a motion to adopt a resolution to approve the Affordable Housing Density Bonus application, Site Plan Review Permit, and Tree Removal Permit, resulting in a "no decision" action.

### **SUMMARY OF APPEALS**

Three appeals challenging approval of the Class 32 Infill Exemption were filed by residents living near the proposed project site: Kent Ipsen, Dan Hummer, and Irina and Alexander Liskovich. The property owner and applicant, William Jordan, filed an appeal of the "No Decision" action by the Planning Commission on the planning entitlements. The February 4, 2020 City Council Staff Report (online, see link in Attachment D) presents a detailed analysis of the points raised in each appeal and staff's responses. The appeals filed with the City are also included with Attachment D online.

## CITY COUNCIL QUESTIONS AND REQUESTS FOR ADDITIONAL INFORMATION

City Council Members' questions and requests for additional information at the February 4 meeting are outlined below. Each question or comment is followed by staff's response:

## Parking and Traffic

1. Look at accommodating more parking spaces on the project site in ways that do not reduce the number of units or increase project costs (reducing building setbacks, incorporating tandem parking, etc.)

The applicant and his consultant team have submitted a revised site plan that increases on-site parking from 86 to 106 stalls (see Attachment F). This increase was accomplished by replacing landscaped area with tandem parking stalls on the southern and central parcels. With this increase in impervious surface area, stormwater quality requirements could still be met, while on-site parking would be provided consistent with a ratio of one stall per one-bedroom unit proposed and 1.6 stalls per two-bedroom unit proposed. Minimum on-site landscaping and open space requirements of the revised layout would also be consistent with CMC Sections 17.20.150 and 17.28.100.

2. Check and clarify statement in Staff Report (p. 27) that parking could not occur on Marsh Creek Road – is there any signage or other restrictions on parking? (noted that cars do park on Marsh Creek Road)

The segment of Marsh Creek Road at the proposed project frontage includes one northbound travel lane, one southbound travel lane, a center two-way left-turn lane, and class 2 bicycle lanes on both sides of the street. The roadway does not have sufficient width for vehicle parking between the travel lane and the curb, where the class 2 bicycle lane is located. Though staff observed no "No Parking" signs along the roadway, California Vehicle Code section 21211(b) prohibits vehicle parking in bicycle lanes. (Some exceptions may be necessary in instances of emergency, to avoid a traffic conflict as in the case of a stalled vehicle, or in compliance with the directions of a peace officer.) CMC section 10.38.010 authorizes the City to charge a fine for parking a car in a bicycle lane.

3. Elaborate further on the City's response to the weaknesses of the Kimley-Horn parking study, as discussed in the Michael Baker peer review.

The Kimley-Horn parking study and the associated peer review by the consulting firm of Michael Baker International were both based on a previous version of the parking proposal that included 81 residential units and a total of 62 parking spaces for the three parcels. Following review of both the original parking study and the peer review, the City took the position that the proposed 62 parking spaces would be inadequate

to meet the anticipated demand for the project. This conclusion is based on the following points in the Michael Baker peer review:

- The Institute of Transportation Engineers (ITE) Parking Generation Manual is only one source of data on parking demand, and there should be more discussion about the applicability of the ITE data to The Olivia project.
- The parking data for the ITE category of Senior Adult Housing (Land Use Code 252) is based on three sites located in Pennsylvania, and the data was collected in 2008.
- It is not clear whether the ITE data that forms the basis of the parking demand estimate for Senior Adult Housing was based on housing for ages 55+ or ages 62+.
- More recent research on senior housing development in California has found that developments restricted to residents of age 55 and older generate more parking demand than those restricted to residents of age 62 and older.
- The Kimley-Horn parking analysis does not provide any discussion of the local setting or context. This project is not located in an urban area that would have a multitude of shopping and employment opportunities and frequent transit service factors which influence vehicle ownership rates and driving habits.

The Michael Baker peer reviewer notes that the City's codified parking requirement for multifamily housing results in a composite rate of 2.23 parking spaces per unit in the project. The peer reviewer suggests that a ratio of 1.1 spaces per unit, or roughly half the codified requirement for a total of 90 spaces, would be consistent with practices of other jurisdictions in California that approve 55+ senior housing with roughly 50 percent of the required parking for non-age-restricted multifamily housing.

In response to the Michael Baker peer review, the City determined that one parking space per dwelling unit, plus a small amount of guest parking, would be the minimum amount of parking required for the City to make the finding that the project would not cause significant parking impacts in the surrounding area. The City therefore required the applicant to modify the project to include 86 parking spaces (one for each residential unit plus five guest spaces). These 86 stalls in the revised project were close to the 90 parking stalls suggested in the Michael Baker peer review. Staff also supported the revised proposal because staff believed it to be a reasonable balance between the increased number of parking stalls suggested by the City's consultant and the other site development requirements of the project, including landscaping minimums, trash enclosure standards, and stormwater quality measures.

4. Clarify whether the parking would be "bundled" with the residential units.

Yes, according to the applicant's parking proposal submitted to the City on August 27, 2019, each residential unit would have an assigned parking space, which is also required in Condition 5 of the recommended Conditions of Approval.

With the applicant's February 19, 2020 revision to the site plan to add 20 more parking stalls to each parcel (for a total of 106), there would be sufficient parking on each parcel to provide at least one stall per unit on each parcel. As such, staff recommends revising Condition 6 to more generally require that a shared parking agreement be recorded between the two northern parcels, without specification as to the number of spaces on each parcel that must be identified as "shared."

5. Have residents of the Stranahan subdivision asked for a parking permit program? Do they want it? Or would the City be forcing this on them?

Residents of the Stranahan subdivision spoke at both the November 12 and December 10, 2019 Planning Commission public hearings to express concerns about the potential for the project's parking to overflow into their neighborhood. Following the November 12 public hearing, staff and the applicant discussed options to address the concerns expressed, and suggested that a parking permit program be implemented as a potential resolution.

With the additional 20 parking stalls now proposed by the applicant, the proposed project would exceed by 16 stalls the number of on-site stalls suggested by the City's consultant in the parking analysis peer review referenced above. Parking provided on-site (106 stalls between the three parcels) would also be close to the 117-stall maximum that the City can require under state Density Bonus Law. Therefore, staff concurs with the applicant's request that the Condition requiring the parking permit program be removed from the resolution.

6. Provide further evaluation of parking, traffic, and safety concerns.

Please see the response to question #3 above regarding the City's evaluation of parking issues.

Regarding traffic concerns and safety for drivers, bicyclists, and pedestrians, it is important to note that the traffic concerns that have been raised by members of the public in previous hearings on The Olivia project, such as excessive traffic speeds on Marsh Creek Road and resulting hazards for bicyclists and pedestrians, are current and existing issues that are not caused by the proposed project.

The standard practice and method in transportation planning for measuring the capacity of roads to accommodate traffic volumes is to evaluate the Level of Service (LOS) at road intersections. LOS is a metric used to evaluate the flow of traffic and amount of traffic congestion. LOS is analyzed by assigning letter "grades" from A through F to the traffic flow at an intersection, with "A" corresponding to free-flowing traffic with minimal delays and "F" corresponding to traffic gridlock and long delays at intersections. LOS is typically evaluated conservatively during morning and evening commute periods, for the single hour within each window when volumes are

generally highest. According to the City Engineer, all intersections in Clayton currently operate at LOS B or better.

The volume of traffic that would be generated by the proposed Olivia project is below the threshold of 100 net new peak hour trips that would trigger requirement for a project-specific traffic study pursuant to the Contra Costa Transportation Authority Congestion Management Plan (2019). In other words, the amount of additional traffic that would be created by the project is not great enough to cause a substantial change in existing traffic flow and patterns, and the roadways in the vicinity of the project site are considered to have sufficient capacity to accommodate both existing traffic and potential future traffic from The Olivia project.

Notwithstanding the above facts, recognizing that traffic issues are a concern for the Clayton community, during the project review process City staff discussed traffic and safety issues (in particular on Marsh Creek Road) with the applicant team. The City Engineer and previous Interim City Manager discussed potential traffic and safety enhancements and traffic demand management measures that could be included as part of the proposed project. The enhancements and measures discussed became the basis for specific recommended Conditions of Approval that were included in the draft Resolution attached to the December 10, 2019 and February 4, 2020 Staff Reports. These recommended Conditions included financial contributions toward a permit parking program for the Stranahan subdivision, installation of electronic speed indicator signage on Marsh Creek Road near the intersection with Stranahan Circle, installation of pedestrian-activated crosswalk flashers at the trail crosswalk south of the project site on Marsh Creek Road, provision of annual bus passes to tenants of the development, and establishment of a car share program for the development.

Although the applicant initially expressed willingness to support these enhancements in concept during in-person discussions with staff, he has opposed the formal Conditions of Approval as they were ultimately drafted by staff. As an alternative, the applicant has offered to contribute \$2,500 toward each of the enhancements and measures listed above. As these additional enhancements were volunteered by the applicant to address public concern and were not required to address an impact caused exclusively by the project, staff recommends the revisions to the Conditions as requested by the applicant and has revised the Conditions to reflect the applicant's willingness to contribute \$5,000 toward multimodal safety and traffic calming measures on Marsh Creek Road near the project site. Staff notes, however, that the City Engineer has advised that the City does not currently have funds to pay for the balance of the suggested enhancements above the applicant's offered contribution of \$2,500 for each. As such, the City would have to pursue grants or other funding opportunities to complete the described improvements but could pursue other, less costly improvements such as signage or striping.

7. If the City wanted to add traffic controls such as a stoplight, stop sign, or cross walk, would a traffic study be required to support that request? Is a traffic study a

requirement for a project such as this? Can the City impose traffic control items without such a study?

As explained above in the response to item #6, a traffic study is not required for this project because the estimated number of peak hour vehicle trips that would be generated by the project, as determined by the trip generation study conducted as part of the CEQA analysis, is below the City's threshold for requiring such a study.

In order to require the project applicant to fund these types of improvements, the City would need to have documentation of the nexus between the improvements being required and the problem or need the improvements are intended to address (see response to item #17 on page 12 for more details). Additionally, the traffic study should evaluate whether warrants are met for installation of traffic signal or stop sign. Warrants are measurable criteria—including vehicle volumes, crashes, pedestrian volume, or school crossings—that are used to inform an analysis of whether a signal or stop sign should be installed. Installation of a traffic signal or stop sign without first determining whether warrants are met could unintentionally result in creation of an unsafe traffic condition.

8. Investigate whether AT&T would consider allowing parking for the project on the adjacent lot they own (lot is very underutilized).

City staff and the applicant have reached out to AT&T to explore the potential opportunity for shared parking. As of the writing of this Staff Report, AT&T has provided a response indicating that they do not have enough parking stalls on-site to lease out, but that they are exploring possible options for paved parking elsewhere on their property.

## California Environmental Quality Act (CEQA)

9. Explain the cumulative impacts exception under the Class 32 exemption (with reference to applicable case law).

The Class 32 categorical exemption (CEQA Guidelines section 15332) cannot be used if, under CEQA Guidelines section 15300.2(b), the City determines that the cumulative impact of "successive projects of the same type in the same place" over time is significant. However, while generally in CEQA practice a cumulative impact is a change that results from the incremental impact of the project in question when added to other projects, under CEQA Guideline section 15300.2(b) the cumulative impact can only result from "successive projects of the same type in the same place."

Importantly, both the "same type" and "same place" limitations restrict the scope of this exception. In *Robinson v. City and County of San Francisco* (2012) 208 Cal.App.4th 950, 958, the court held that the phrase "in the same place" should be interpreted to refer to the area where the environmental impact will occur and that the

affected area will depend on the nature of the environmental impact. Thus, regarding the claim that installation of wireless telecommunications equipment on utility poles would have cumulative aesthetic and noise impacts, the exception did not apply, because there was no showing that multiple devices would be installed within visual or auditory range of each other.

Further, the cumulative impact exception applies when the impact at issue generally affects the environment of persons *in general* and does not apply to activity that has an impact only on some particular persons. (*Santa Monica Chamber of Commerce v. City of Santa Monica* (2002) 101 Cal.App.4th 786, 799 [adverse impact of parking restrictions on certain categories of drivers did not trigger exception].) Finally, speculation that significant cumulative impacts will occur simply because other projects may be approved in the same area is insufficient to trigger this exception. Listing other projects in the area that might cause significant cumulative impacts is not evidence that the proposed project will have adverse impacts or that the impacts are cumulatively considerable. (*Hines v. California Coastal Commission* (2010) 186 Cal.App.4th 830, 857.)

## 10. What is the definition of "piecemealing" in the context of CEQA?

The term "piecemealing" comes from case law concerning the description of projects under review. Under CEQA, the entire project being proposed for approval must be described. A complete project description is necessary to ensure that the environmental impacts of the entire project are considered. A lead agency may not split a single large project into smaller ones resulting in **piecemeal** environmental review that fails to consider the environmental consequences of the entire project. (*East Sacramento Partnership for a Livable City v. City of Sacramento* (2016) 5 Cal.App.5th 281, 293). Accordingly, a court may reject a CEQA document as inadequate if the court concludes that it limited the scope of environmental review by artificially narrowing the project description, thus minimizing the project's impacts and undermining public review. However, there is no "piecemealing" when a CEQA document does not analyze a development that is planned **independently** of the project; in other words, if a development could be approved and operated whether or not the project itself was approved.

### 11. What is the definition of "substantial evidence" in the context of CEQA?

Pursuant to CEQA Guidelines section 15384(a) substantial evidence is defined as "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." (*Laurel Heights Improvement Ass'n v Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 393, 409.) Substantial evidence includes facts, reasonable assumptions predicated on facts, and expert opinion supported by facts, but *does not* include argument, speculation, or unsubstantiated opinion. (Public Resources Code §§21080(e), 21082.2(c).)

The City's determination that the Class 32 Infill Exemption under CEQA applies because approval of the project would not result in any significant effects to traffic, noise, air quality ,or water quality is subject to the substantial evidence standard of review. This means that if the City identifies substantial evidence in the record to support a conclusion, it may proceed, even if other evidence arguably supports a different conclusion.

In Banker's Hill Hillcrest Park West Community Preservation Ground v. City of San Diego (2006)139 Cal. App. 4th 249, the Court considered the standard of review that should be applied to the question of whether the urban in-fill exemption applies, by its own terms, to a project, specifically whether "[a]pproval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality." (CEQA Guidelines, § 15332(d), italics added; Banker's Hill, at 268-269.) The Court held that the "urban in-fill exemption requires the agency to determine that '[a]pproval of the project would not result' in a significant effect to traffic, noise, air quality, or water quality. Thus, the urban in-fill exemption calls for the agency to make a definitive finding, at the preliminary review stage, as to whether or not there will be a significant environmental effect.....The use of this language leads us to conclude that the fair argument standard does not apply." (Banker's Hill, supra, 139 Cal.App.4th at 268-269.) Accordingly, use of the urban in-fill exemption does not depend on whether a project may have a significant effect, but instead depends on if it will have a significant effect. The Court concluded "[w]e inquire whether the record contains substantial evidence to support the City's finding that the Project will not have a significant effect. If we locate substantial evidence in the record to support that conclusion, we will uphold the City's determination, even if other evidence arguably supports a different conclusion." (Id.)

12. What is the definition of "urban uses" in the criteria for a Class 32 Infill Exemption ("substantially surrounded by urban uses")?

The Court in *Banker's Hill* concluded that "[t]he term 'urban' ... refers more to the *location and 'varying characteristics' of a use than to the type of use.* [Citation.] For example, a residential dwelling can exist either in an urban area or in a rural area.... So it is with golf courses." (*Banker's Hill* citing *Friends of Mammoth v. Town of Mammoth Lakes Redevelopment Agency* (2000) 82 Cal.App.4th 511, 545 [italics added].) Given *Banker's Hill*, the term "urban uses" should be applied based on the location and varying characteristics of a use, as opposed to the type of use. Indeed, the *Banker's Hill* Court noted that "a residential dwelling can exist in either an urban area or in a rural area...." The key to assessing whether a use is "urban" will be the "specific characteristics and location" of the use. As such, for purposes of the Infill Exemption, the fact that a site is bordered by a single-family home on one or more sides can serve as evidence that the project site is substantially surrounded by urban uses if the single-family homes are located within city limits, and particularly within the center or downtown of a city.

The Banker's Hill Court noted that that it could not locate any authority interpreting the phrase "substantially surrounded by urban uses." Thus, it looked at case law defining "urban uses" in the Community Redevelopment Law. There it found case law defining the term "urban uses," "[t]he term 'urban' is 'not fixed, objective, or easily ascertainable," "but it has been "'defined as "of, relating to, characteristic of, or taking place in a city ... constituting or including and centered on a city ... of, relating to, or concerned with an urban and [specifically] a densely populated area ... belonging or having relation to buildings that are characteristic of cities...." ' " (Friends of Mammoth v. Town of Mammoth Lakes, supra 82 Cal.App.4th 511, 541, 544) [as part of a CEQA analysis, determining whether a series of proposed projects related to "urban uses" under the Community Redevelopment Law].) Accordingly, "[t]he term 'urban' ... refers more to the location and 'varying characteristics' of a use than to the type of use. [Citation.] For example, a residential dwelling can exist either in an urban area or in a rural area.... So it is with golf courses." (Id. at p. 545, 98 Cal.Rptr.2d 334, italics added.) The *Friends of Mammoth* court, for instance, analyzed whether the golf course at issue was an urban use or a rural use by analyzing its specific characteristics and location. Because it contained "significant amounts of natural and preserved forest lands" and was "surrounded by undeveloped forest land," the court determined that it was not "related to or characteristic of a city or a densely populated area," and thus not an urban use. (Ibid.) The Banker's Hill Court thus applied the Friends of Mammoth approach to determine whether Balboa Park, which formed one boundary of the project site under consideration for use of an Infill Exemption. The Banker's Hill Court concluded that Balboa Park was "a guintessential urban park, heavily landscaped, surrounded by a densely populated area, and containing urban amenities such as museums, theaters, and restaurants. Accordingly, it is "characteristic of a city or a densely populated area," and, as such, the Court found it to be an "urban use."

13. Clarify the circumstance of having a City (Planning Commission) approval of the CEQA Categorical Exemption without having a project attached (i.e., there is no City approval of the project).

CEQA does not require a lead agency to act on project entitlement applications at the same time a lead agency makes a CEQA determination. It requires only that CEQA review be conducted for all "projects," as defined by CEQA, prior to the lead agency taking any approval action regarding projects. Further, Public Resources Code section 21151(c) provides that: If a nonelected decisionmaking body of a local lead agency certifies an environmental impact report (EIR), approves a negative declaration or mitigated negative declaration, or determines that a project is not subject to this division, that certification, approval, or determination may be appealed to the agency's elected decisionmaking body, if any. Here, the Planning Commission took a final CEQA action, finding that the project is exempt under the CEQA Guideline section 15332 Infill Exemption. Accordingly, the City was required by Public Resources Code section 21151 to accept an appeal of the Planning

Commission CEQA action to its City Council, regardless of whether any other approvals were issued by the Planning Commission. If the City Council denies the appeal and thus determines that the application of the Infill Exemption is appropriate for the project, then, under CEQA, the Council can proceed to consider whether or not to approve the project.

14. What is the fair argument standard and how does that apply?

The "fair argument" standard requires a lead agency to prepare an EIR whenever substantial evidence in the record supports a fair argument that a project may have a significant effect on the environment. The fair argument test stems from the statutory mandate that an EIR be prepared for any project that "may have a significant effect on the environment." (Pub. Res. Code §21151.) Under this test, if a proposed project is <u>not</u> exempt <u>and</u> may cause a significant effect on the environment, the lead agency must prepare an EIR. (Pub. Res. Code §§21100(a), 21151; CEQA Guidelines §15064(a)(1), (f)(1).) "Significant effect upon the environment" is defined as "a substantial or potentially substantial adverse change in the environment." (Pub. Res. Code §21068; CEQA Guidelines §15382.) A project "may" have a significant effect on the environment if there is a "reasonable probability" that it will result in a significant impact. While the fair argument standard prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact, it does not mean that the lead agency has no discretion concerning the quality of the evidence or the determination of significance. The agency must consider the entire record and decide whether the information relating to potential impacts is "substantial evidence" sufficient to support a "fair argument" that the impacts may occur and whether the identified impacts should be considered "significant."

Here, per *Banker's Hill*, we know that use of the urban infill exemption does not depend on whether a project **may** have a significant effect, but instead depends on if it **will** have a significant effect. As such the applicable standard for The Olivia project is "substantial evidence," not "fair argument."

15. How does environmental review pursuant to CEQA evaluate wildfire risk? When does wildfire risk become a factor in doing analysis under CEQA?

The CEQA Class 32 infill exemption does not require an evaluation of wildfire risk, nor do any of the exceptions to exemptions in CEQA Guidelines section 153002. Even if a project was not exempt from CEQA, wildfire risk only needs to be evaluated under CEQA if a project is located in a Very High Fire Hazard Severity Zone. The project is not located in a Very High Fire Hazard Severity Zone as designated by the California Department of Fire and Forestry, Office of the State Fire Marshal (<a href="https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/">https://osfm.fire.ca.gov/divisions/wildfire-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/</a>).

## **Density Bonus Law Questions**

16. Explain the distinction between concessions and waivers under the Density Bonus Law.

**Concessions** are defined under the Density Bonus Law as modifications to development standards, including zoning regulations and design standards, that result in *actual and verifiable cost reductions*. The applicant must demonstrate that a requested concession is necessary to make the project economically feasible at the permitted density and with the inclusion of the proposed affordable units. The Density Bonus Law stipulates the number of concessions to which a project developer is entitled, based on the proposed percentage and affordability levels of below market rate units. In the case of The Olivia, the applicant is entitled to two (2) concessions.

The Density Bonus Law also provides for the **waiver or reduction** of any development standard that is shown to *physically preclude construction of the proposed project* at the permitted density. For waivers, the applicant does not need to demonstrate economic necessity. The Density Bonus Law does not impose a limit on the number of waivers a developer may request.

## Recommended Conditions of Approval

17. Clarify the requirement for a "reasonable nexus and rough proportionality" as it applies to the City's Conditions of Approval requesting financial contributions from the applicant.

Generally, courts have held that cities may impose Conditions on development so long as the Conditions are reasonable, and there exists a sufficient nexus between the Conditions imposed and the projected burdens of the proposed development. However, an applicant can always voluntarily provide more than what is required by law to create a better project. Here, the applicant initially met with City staff to discuss Conditions that would result in a better project and address public concerns expressed at the public hearings before the Planning Commission. The applicant was initially supportive of the five Conditions of Approval (Conditions 116-120 of THE draft Planning Commission Resolution) in concept, and therefore, they were included in the Resolution of approval. However, after the applicant had an opportunity to review the Conditions in greater detail and estimate the costs associated with each Condition, he revised the five Conditions and provided those revisions to the City Council at its last meeting. As the five Conditions were recommended with the initial concurrence of the applicant as voluntary measures, staff recommends that the City Council approve the modified Conditions as presented by the applicant and further revised by staff.

## Project Consistency with General Plan and Zoning

18. Check and clarify the reference to contiguous parcels in the Planned Development zoning district (noting that these parcels are not contiguous).

Clayton Municipal Code section 17.28.010 defines a Planned Development (PD) District, or PD District, as "a zone which allows for an integrated, comprehensively-planned area located on a single tract or contiguous tracts of land under a single or joint ownership which allows flexibility in the land use controls typically required by another zone." Each of the three parcels in the proposed development has a zoning designation of PD District. The three parcels are not technically contiguous; the northernmost and middle parcels (6170 High Street and 6450 Marsh Creek Road) have a small section of shared property line, and the middle and southernmost parcels (6450 and 6490 Marsh Creek Road) are separated by the "pole" portion of a flag lot, with the bulk of that lot being located immediately to the west of 6450 Marsh Creek Road). See Attachment A for a vicinity map and assessor's map defining the boundaries of each parcel.

Because the parcels are not contiguous, the application review process has considered each individual lot separately in terms of development standards and design guidelines. However, the properties are still eligible for review under the Planned Development process since this is the applicable zoning district for each parcel.

19. Address the fourth point of Dan Hummer's appeal more thoroughly regarding the project's consistency with General Plan, including all specific General Plan policies cited.

It is important to note that a general plan is a broad, overarching policy document, the purpose of which is to provide policy guidance related to the growth, development, and conservation of a local jurisdiction over a long-term planning horizon, typically 25 to 30 years. General plan goals and policies do not have the regulatory force of law, as do zoning regulations or other requirements codified in a jurisdiction's municipal code. General plan goals and policies are typically more flexible and subjective than codified regulations, and in many cases, there is room for interpretation as to how they are applied to a specific project or proposal. In addition, there are instances in which two or more policies or objectives of a general plan, as they pertain to a specific project or proposal, may compete with or be in conflict with each other. In such cases, careful discretion and interpretation is needed in analyzing how to best fulfill the overall intent of the general plan and the vision it sets forth for the local jurisdiction's future.

The fourth point in the appeal submitted by Dan Hummer included the following statements challenging The Olivia project's consistency with the Clayton General Plan:

Community Design Element, Residential Development section, page V-7:
 "Retention of large estates should be encouraged, but if they are to be
 redeveloped, then development should be done in such a way as to preserve
 trees, provide adequate screening from roads, and prevent the loss of
 atmosphere."

This language from the Clayton General Plan notes that retention of large estates should be *encouraged* (i.e., not required in all cases). Various elements of the General Plan, including the Land Use, Housing, and Community Design Elements, acknowledge that there will be areas of Clayton where higher-density development will occur – specifically the Town Center. The goal of encouraging retention of large estates is most relevant to those areas with a land use designation under the Land Use Element of Rural Estate (0 to 1.0 dwelling units per acre) and Single Family Low Density (1.1 to 3 dwelling units per acre). In the case of the subject parcels for The Olivia project, which are located in the Town Center area, the land use designation is Multifamily High Density (20 dwelling units per acre) and the parcels are identified in the Housing Element as opportunity sites for the development of higher-density and/or affordable housing. Moreover, the section on the Town Center in the Community Design Element (page V-5) includes objectives and policies which encourage development of multi-story buildings and pedestrian activity.

Regarding preservation of trees when properties are redeveloped, the Planning Commission Staff Report of November 12 (included with the February 4 Staff Report available online, see link in Attachment D), pages 15-16, includes a detailed discussion of trees to be removed and new trees to be planted. To summarize, the total number of existing trees on the three parcels is 152; of these, 45 are proposed to be retained and 107 are proposed to be removed. In addition, the planting plan includes 99 proposed new trees to be planted.

Although preserving existing trees can be challenging due to space constraints in the case of multi-family residential development projects in the density range allowed for the subject parcels (more than 20 units per acre with the application of the density bonus), staff worked carefully with the applicant during the project review process to ensure that healthy existing trees were preserved where possible. Special attention was given to preserving tree species defined as "Protected Trees" in the Tree Protection chapter of the City's building code (see Clayton Municipal Code Section 15.70.015.C). The tree removal plan for each parcel is included as Sheet C.3 of the civil plan sets (attached to the February 4 Staff Report available online, see link in Attachment D). The trees to be removed are generally either located within the proposed building footprints, required parking areas, or required stormwater treatment areas; or are identified in the Arborist Report submitted for the project (also attached to the February 4 Staff Report) as having poor suitability for retention due to the tree's condition and

health. Large, mature, and healthy trees are proposed to be preserved and incorporated into the project's overall landscape design where they are not located within the building footprint or other required facilities, such as Tree #17 (a 22-inch oak) on 6170 High Street.

New trees are proposed to be planted along the street frontage of each of the three parcels, spaced at close intervals, to help screen the buildings from roads. The proposed planting plans are included as sheet L.6 of the landscape plan sets (included with the February 4 Staff Report online via link in Attachment D). Tree species to be planted along street frontages include Bloodgood London Plane, Golden Rain Tree, and Lavender Crape Myrtle; with sizes ranging from 15-gallon trees to 48-inch box trees.

### Land Use Element, Goals, page II-2:

- "1. To maintain the rural character that has been the pride and distinction of Clayton.
- 2. To encourage a balance of housing types and densities consistent with the rural character of Clayton.
- 3. To preserve the natural features, ecology and scenic vistas of the Clayton area."

As noted above, the General Plan emphasizes the desire to maintain Clayton's rural character while simultaneously promoting a Town Center with commercial facilities and higher-density residential development. The architectural design of the proposed buildings is intended to be reminiscent of the architectural style of old western communities or mining towns and to blend into the semi-rural context and character of Clayton. Exterior features that define this style include horizontal siding, batten board siding, tall windows, parapet roof styles, porches, heavy trim for shadows, and rustic color schemes. See the architectural plans included with the February 4 Staff Report available online via link provided in Attachment D.

The Olivia project is a good example of a project that adds to a balance of housing types and densities in Clayton. According to the City's Housing Element (Tables 6 and 7), 95 percent of the City's existing residential units are attached or detached single family homes, and 90 percent of the City's housing stock is owner occupied. The Olivia would increase housing diversity in Clayton by offering a different residential type (rental apartments) and expanding housing options for prospective residents and empty nesters looking to downsize or avoid maintenance costs associated with homeownership.

In terms of preservation of natural features, the natural topography of the subject parcels would be maintained, with the development footprint limited to the existing relatively flat portions of the lots and the downsloping portions on the west side of each lot to remain as open space. Aside from topography and trees (discussed

above), the parcels do not have significant natural features (e.g. creeks or other water bodies, rock outcroppings, etc.)

 "The project is requesting removal of large established trees, minimal setbacks, and three stories which is not consistent with the General Plan, and is exactly the opposite of the General Plan."

See the discussion above about removal of trees. In terms of building setbacks, the minimum required setbacks for the subject properties are 20 feet from front lot lines, 15 feet from interior side lot lines, and 15 feet from rear lot lines. These required setbacks are established in the development standards for the Multiple Family Residential High Density (M-R-H) zoning district, which are the standards to be used for proposed residential development in the Planned Development zoning that applies to the subject parcels (CMC Section 17.28.050(B)). The M-R-H development standards are intended to implement the type and scale of development envisioned under the Multifamily High Density General Plan land use designation (and therefore to ensure that development projects on land with the Multifamily High Density designation are consistent with the policies and objectives of the General Plan).

The table on page 12 of the November 12 Planning Commission Staff Report (included with February 4 Staff Report available online via link provided in Attachment D) shows the proposed building setbacks for all three subject parcels. The project conforms with the required setbacks from all but two of the 12 property lines of the three subject parcels. In those two instances, the project is requesting a reduction in the required setback pursuant to the Density Bonus Law. For 6170 High Street, a reduced front setback of 8 feet is requested (where 20 feet is required), and for 6450 Marsh Creek Road a reduced side setback of 11 feet is requested (where 15 feet is required) on the south side of the lot. The applicant is requesting the setback reductions in order to physically accommodate the development and associated facilities with the number of units allowed by the Density Bonus Law. Other setbacks for the project, such as front setbacks of 20 feet and 28 feet for the Marsh Creek Road properties, side setbacks ranging from 27½ feet to 90 feet, and rear setbacks ranging from 24 to 57 feet, range from adequate to generous for multi-family residential development projects.

Regarding the three-story height of the buildings, the Land Use Element of the General Plan allows for apartments or condominiums to be "two-story (or higher)" on properties designated as Multifamily High Density, and the Town Center section of the Community Design Element allows for multi-story buildings (Policy 11b).

In summary, while the Clayton General Plan emphasizes preservation of the town's rural character and retention of large estates where possible, it also

encourages development of a vibrant Town Center with larger multi-story buildings, a diversity of housing types and densities, and land uses that support high levels of pedestrian activity. The Olivia project is a good example of a project that, due to its location near the Town Center and public facilities (library, bus stops, trails), is considered appropriate for higher-density residential development. The project fulfills several key goals of the General Plan to promote multi-family residential housing that is affordable to households at a range of income levels (based on the inclusion of seven below market rate units).

Finally, Density Bonus Law provides that the granting of a density bonus, concession or incentive does not require a general plan amendment or zone change. (Gov. Code § 65915(f)(5) and 65915 (j)(1).) Furthermore, *Wollmer v. City of Berkeley* 193 Cal.App.4th 1329, 1347-48 (2011) provides that the zoning standards that the City waived in order for the affordable housing project to obtain a density bonus, were not applicable for purposes of CEQA guidelines section 15332 Infill Exemption for projects which comply with applicable general plan designations and zoning standards, and therefore the project qualified for the categorical Infill Exemption.

## City Review Process and Procedures

20. What would be the review process if the applicant were to apply for a condominium conversion in the future, and what rules would apply (under the Density Bonus Law)?

An application for condominium conversion submitted to the City would be reviewed according to the provisions of the Subdivision Map Act. The process for condominium conversions is specifically outlined in California Government Code Section 66427.1 and includes filing of a tentative subdivision map with the governing local jurisdiction and proper notification to existing rental tenants.

Per the City's Affordable Housing Density Bonus Requirements Ordinance, the applicant would be "ineligible for a Condominium Conversion Density Bonus or other incentives under this section if the apartments proposed for conversion constitute a Residential Development Project for which a Density Bonus or other incentives were previously provided in accordance with this chapter" (CMC Section 17.90.070). In other words, the allowance for a density bonus for The Olivia project is based on the current proposal for newly constructed residential units to be offered for rent, and if conversion to condos were to be proposed in the future, there would be no additional bonuses or other incentives given related to the State Density Bonus Law or the City Affordable Housing Density Bonus Ordinance.

21. If a future conversion were proposed from rental units to condominiums (ownership), how would the future State control for the low-income units, as well as the age restriction for all units?

A condominium conversion of rental units would require a tentative subdivision map application (Government Code Section 66452), a discretionary action which could be Conditioned. The City would have the ability and authority to impose a Condition on the approval of a potential future condominium conversion application that would require the seven affordable units to carry the deed restriction and to remain available for rental occupancy by residents who are "very low income" level as defined by HUD, and that are aged 55 or older. These Conditions could stipulate that the restrictions must remain in effect for a specified period of time (e.g., up to 55 years, consistent with other provisions of Density Bonus Law applicable to affordable units). Responsibility for annual reporting to the City and submittal of documentation verifying age and income eligibility of residents could be assigned to the owner of the deed restricted very low income units.

22. Clarify the information in the February 4 City Council Staff Report about property tax revenue (confirm whether taxes would be assessed by parcel as opposed to by individual units).

Property taxes would be assessed per parcel, to each owner of each parcel, and would be based on the value of the property as developed. Because the rental units would not be individually owned, each unit would not be assessed property tax.

## 23. How will the 55+ age restriction be enforced?

As part of the Affordable Housing Density Bonus application, the applicant has described the procedure for prospective tenants to apply to rent the affordable units and the documents required to verify income and age eligibility, which could include annual reporting, surveys, affidavits, and/or requirements that tenants agree to submittal of age-identifying identification (such as a driver's license) under the terms of their lease agreement. There would be no requirement for the property owner to restrict the remaining 74 units for senior occupancy. Conversion of the property's occupancy from restricted senior to unrestricted family occupancy would not result in new traffic or other environmental impacts and would not change the conclusion that the 81-unit apartment development would be exempt from CEQA. Because of the inclusion of seven affordable housing units in the project, the development would remain eligible for a concession to reduce on-site parking from 117 to 106 stalls pursuant to State Density Bonus Law (Government Code Section 65915[p][1]), irrespective of the age of tenants.

## 24. Is there any sunset on the age restriction?

As noted above in the response to item #23, with the exception of the seven affordable units, there is no requirement for the property owner to restrict occupancy of the development to seniors in the long-term, and no change to the environmental impact conclusions made about the project would result from such a change in tenancy.

25. Provide a clear and detailed outline of what the City can and cannot request, make it very clear about which areas and topics the City has discretion.

## Actions the City cannot take with respect to the application:

- Reduction in the proposed density or number of residential units
- Denial of either of the requested concessions reduction in building and parking setback requirements and reduction in the required number of parking spaces if the evidence in the record demonstrates that the concessions result in identifiable and actual cost reductions to provide for affordable housing costs (the exception to the requirement to grant requested concessions under the Density Bonus Law is if the City finds that a concession would cause a specific, adverse, impact as defined in Government Code section 65589.5, on public health and safety or be contrary to state or federal law).
- Specifically with respect to parking, the City cannot require the project to include parking spaces in excess of the maximum set by the Density Bonus Law, which is one space per 1-bedroom unit and two spaces per 2-bedroom unit. For The Olivia project, which proposes 45 one-bedroom units and 36 two-bedroom units, the maximum parking the City may require per the Density Bonus Law is 117 spaces. However, because the applicant is requesting a reduction in required parking as one of the two concessions to which he is entitled, as noted above, the City cannot require parking in excess of the number of spaces that have been shown to result in identifiable and actual cost reductions to provide for affordable housing costs.
- Denial of any of the requested waivers or reductions of development standards, if the evidence in the record demonstrates that these are necessary to avoid physically precluding construction of the project being built at the permitted density and with the granted concessions, unless there is a specific adverse impact as defined in Government Code section 65589.5 or contrary to State or Federal law. The waivers/reductions of development standards being requested for the project are:
  - 1. Parking Lot Landscaping Requirements
  - 2. Site Plan Review Standard for Building Size and Bulk
  - 3. Preservation of Natural Features (site design guideline in the Town Center Specific Plan)
  - 4. Percentage of Regular and Compact Parking Spaces
  - 5. Building Height limit of 35 feet within 50 feet of abutting single family residential district
  - 6. Tree Replacement Required Trunk Diameter Ratio

See pages 7 to 10 of the November 12 Planning Commission Staff Report (included with February 4 Staff Report available online via link provided in Attachment D) for a detailed discussion of the requested waivers/reductions. (Note that the waiver related to covered parking has been removed from the application, since State law allows the developer to provide required parking as uncovered spaces.)

## Areas where the City has discretion over the application:

The City may request modifications to the project in any of the following areas, provided that the requested changes do not contradict or interfere with any of the topics listed above for which the Density Bonus Law requires City approval. The City must also approve the project elements as proposed if they comply with the general plan, zoning regulations, and other applicable development standards. Furthermore, under the Housing Accountability Act, when a proposed housing development project complies with applicable, objective general plan, zoning, and design review standards in effect at the time that the application is deemed complete, but the City decides to impose a Condition that will have the same effect or impact on the ability of the project to provide housing, the City must make the specific adverse impact findings as noted above. (Gov. Code § 65589.5(j)(1).)

- Site planning (placement on the project site of buildings, parking, driveways, open space, stormwater facilities, and other project features)
- Architectural design (architectural style, exterior building materials and colors, fenestration and other detailing)
- Tree removal
- Landscape design (number, size, and species of proposed new plantings)
- Stormwater treatment plan (design and configuration of stormwater facilities)

## Demographic Factors

26. What is the average number of vehicles owned per person or per household, and/or by age?

Demographic information from the Association of Bay Area Governments and the Metropolitan Transportation Commission states that the average number of vehicles owned per household in the San Francisco Bay Area in 2015 was 1.74.

Staff was not able to find specific data on vehicle ownership by age, either for the Bay Area or for the nation as a whole, but multiple sources suggested that members of older generations (e.g., baby boomers, currently of ages 56 to 74) have higher rates of vehicle ownership than younger generations (e.g. millennials, currently of ages 26 to 40).

27. What is the average age for the workforce in the Bay Area?

According to the U.S. Bureau of Labor Statistics, the median age of all employed persons nationwide is 42.3 (in 2019), and about 40 percent of people ages 55 and older are still working. For California, the median workforce age is 40 years. This data was not available for the San Francisco Bay Area or for specific counties.

## Technical/Background Studies and Project Consultants

28. Please provides copies of all the background studies and reports referenced in Staff Reports, and note which entity engaged the consultant for each (i.e. the applicant or the City).

Studies prepared on behalf of applicant

### For Environmental Review - CEQA

Biological Constraints Assessment Survey Results. Consultant: Olberding Environmental

Air Quality and Greenhouse Gas Impact Assessment. Consultant: Ambient Air Quality & Noise Consulting

Noise and Groundborne Vibration Impact Assessment. Consultant: Ambient Air Quality & Noise Consulting

Trip Generation Study. Consultant: Kimley Horn

## For Affordable Housing Density Bonus Application

Economic Analysis of Requested Concessions. Consultant: PlaceWorks

Parking Study. Consultant: Kimley Horn

Studies prepared on behalf of City of Clayton

### For Environmental Review - CEQA

*Infill Exemption Environmental Analysis.* Consultant: Raney Planning and Management, Inc.

Peer Review of Bio Technical Study – by Raney Planning & Management, Inc.

Peer Review of Air Quality/GHG Technical Study – by Raney Planning and Management, Inc.

Peer Review of Noise Study – by J.C. Brennan and Associates

Peer Review of Traffic Study - by Abrams Associates

## For Affordable Housing Density Bonus Application

Peer Review of Economic Analysis of Requested Concessions by PlaceWorks. Consultant: Michael Baker International

Peer Review of Parking Study by Kimley Horn. Consultant: Michael Baker International

All studies/reports and peer reviews were not attached to the February 4 Staff Report online (see link are in Attachment D), but are included with this Staff Report as Attachments E through N.

29. What is the background on why the City engaged Raney Planning & Management for the CEQA Infill Exemption Analysis?

The use of a consultant for preparation of the environmental analysis has been common practice for the City, due to staffing limitations of the Planning Division. For The Olivia project, the City solicited proposals from environmental consulting firms to support staff in the preparation of environmental, policy, and statutory analyses necessary for the decision-making process for the project. Raney Planning and Management was the sole responder to the request for proposals for preparation of the environmental analysis. The firm has conducted recent CEQA analyses for other projects in Clayton and has familiarity with the City, and the Community Development Director had confidence in the firm based on that past working experience.

30. In the Michael Baker peer review of the "Economic Analysis of Requested Concessions" by PlaceWorks, why was Concord data used? What was the basis of the financial feasibility analysis?

The purpose of this peer review was to verify whether the conclusions made in the "Economic Analysis" by PlaceWorks, which were necessary in order to justify the City's granting of the requested concessions under the Density Bonus Law, were reasonable and sound. The analysis used various relevant data to determine whether the requested concessions (a reduction in required setbacks for buildings and parking, and a reduction in the required number of parking spaces) would result in actual and identifiable cost reductions that would make construction of the project economically feasible with inclusion of the affordable units.

In the peer review, Michael Baker used data from Concord for only one purpose – to evaluate whether the monthly market-rate rents assumed for the project in the PlaceWorks "Economic Analysis" were reasonable for this geographic area. As stated in the Michael Baker memo, monthly rental rates for 1- and 2-bedroom apartments in Concord were used for comparison because the reviewer found very few apartments advertised for rent in Clayton that could be used to check and verify the current market rates for rental apartments. Current monthly rental rates in Concord were the best available data in the vicinity of the proposed project.

## **FISCAL IMPACTS**

If approved, The Olivia on Marsh Creek project would contribute an estimated \$30,000 annually in property tax. The City would provide general public services to the residential development. The applicant would contribute up to \$7,500 toward partially funding road improvements and tree plantings throughout the City. The City would need to pursue additional funds, as from grants, to fully implement the suggested transportation improvements.

## **CONCLUSION**

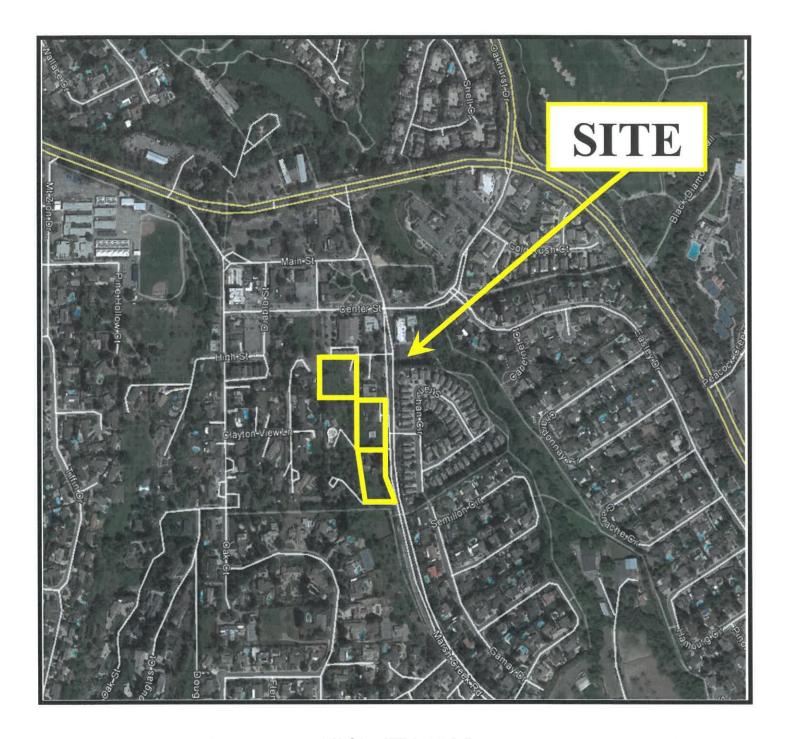
Staff maintains that the project is consistent with State law as well as all applicable City policies and standards and that the evidence in the record supports both determination of a Class 32 Categorical Exemption from CEQA and approval of the Affordable Housing Density Bonus Application, Site Plan Review Permit, and Tree Removal Permit.

## **ATTACHMENTS**

- A. Vicinity Map and Assessor's Parcel Map
- B. Proposed Resolution denying the appeals and upholding the Planning Commission's approval of the Infill Exemption pursuant to California Environmental Quality Act Guidelines Section 15332
- C. Proposed Resolution approving the Affordable Housing Density Bonus Application, Site Plan Review Permit, and Tree Removal Permit
- D. Weblinks to Staff Report and Attachments from the February 4, 2020, City Council Meeting, and the November 12 and December 10, 2019, Planning Commission Meetings
- E. Minutes Excerpt from the February 4, 2020, City Council Meeting
- F. Revised Project Plans from Applicant, received February 19, 2020
- G. "Biological Constraints Assessment Survey Results" by Olberding Environmental
- H. "Air Quality and Greenhouse Gas Impact Assessment" by Ambient Air Quality and Noise Consulting
- Peer reviews of Biological Assessment and Air Quality/GHG Assessment by Raney Planning and Management
- J. "Noise and Groundborne Vibration Impact Assessment" by Ambient Air Quality and Noise Consulting
- K. Peer review of Noise Study by J.C. Brennan and Associates
- L. "Trip Generation Study" by Kimley-Horn
- M. Peer review of Trip Generation Study by Abrams Associates

# Attachment A

Vicinity Map and Assessor's Parcel Map



## **VICINITY MAP**



Olivia on Marsh Creek Project ENV-01-17/DBA-01-19/SPR-04-17/TRP-24-17 6170 High Street (APN: 119-021-063)

6450 Marsh Creek Road (APN: 119-021-055) 6490 Marsh Creek Road (APN: 119-021-013)





# Attachment B

Proposed Resolution denying the appeals and upholding the Planning Commission's approval of the Infill Exemption pursuant to California Environmental Quality Act Guidelines Section 15332

## **RESOLUTION NO. XX-2020**

A RESOLUTION DENYING THE APPEALS AND UPHOLDING THE PLANNING COMMISSION'S APPROVAL OF AN INFILL EXEMPTION IN ACCORDANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) FOR THE OLIVIA ON MARSH CREEK, AN 81-UNIT SENIOR RENTAL HOUSING DEVELOPMENT (ENV-01-17)

## THE CITY COUNCIL City of Clayton, California

WHEREAS, the City received an application from William Jordan requesting review and consideration of an Affordable Housing Density Bonus Application (DBA-01-19), Site Plan Review Permit (SPR-04-17), Tree Removal Permit (TRP-24-17), and related Environmental Review (ENV-01-17) for development of an 81-unit senior residential development located on three adjacent parcels with a total area of 3.02 acres ("Project"), located at the southwest intersection of High Street and Marsh Creek Road (Assessor's Parcel Nos. 119-021-063, 119-021-055, and 119-021-013); and

WHEREAS, the Project meets the definition of an infill development project as specified in Section 15332 of Title 14 of the California Code of Regulations, the California Environmental Quality Act ("CEQA") Guidelines; and

WHEREAS, the City commissioned an independent analysis of the Project's eligibility for a Class 32 Infill Exemption by Raney Planning & Management, Inc., entitled "Infill Exemption Environmental Analysis for Clayton Senior Housing Project," and dated June 14, 2019, which analyzes whether the Project meets all criteria of the Class 32 Infill Exemption as stated in CEQA Guidelines Section 15332, and which is attached as Exhibit A to this Resolution; and

WHEREAS, the Clayton Planning Commission reviewed the "Infill Exemption Environmental Analysis for Clayton Senior Housing Project;" and

WHEREAS, on November 12, 2019, the Clayton Planning Commission held a duly-noticed public hearing on the Project, including staff's recommended determination of a Class 32 Categorical Exemption (Infill Development Projects), at which time the public hearing was continued to December 10, 2019; and

WHEREAS, on December 10, 2019, the Planning Commission held a second duly-noticed public hearing on the Project and the recommended infill exemption, and subsequently voted 3-1 to approve the determination of a Class 32 Categorical Exemption (Infill Development Projects) pursuant to the CEQA Guidelines; and

WHEREAS, on December 30, 2019, Kent Ipsen, the owner of a property adjacent to the subject site, filed an appeal of the Planning Commission approval of the CEQA Categorical Exemption (Class 32, Infill Development Projects) for the proposed project; and

WHEREAS, on January 2, 2020, Dan Hummer, the owner of a property in the vicinity of the subject site, filed an appeal of the Planning Commission approval of the CEQA Categorical Exemption (Class 32, Infill Development Projects) for the proposed project; and

WHEREAS, on January 2, 2020, Irina and Alexander Liskovich, the owners of a property in the vicinity of the subject site, filed an appeal of the Planning Commission approval of the CEQA Categorical Exemption (Class 32, Infill Development Projects) for the proposed project; and

WHEREAS, on February 4 and March 3, 2020, the City Council held aduly noticed public hearings, accepting testimony from the appellants, the applicant and the public; and discussed the appeal and staff's recommended determination of a Class 32 Categorical Exemption (Infill Development Projects) pursuant to the CEQA Guidelines, for the project.

## **NOW THEREFORE, BE IT RESOLVED, as follows:**

- 1. The foregoing recitals are true and correct.
- 2. The City Council of the City of Clayton hereby finds, on the basis of the whole record before it, that:
  - a. The City of Clayton exercised overall control and direction over the CEQA review for the Project, including the preparation of the "Infill Exemption Environmental Analysis for Clayton Senior Housing," and independently reviewed the same; and
  - b. There is no substantial evidence that the Project will have a significant effect on the environment; and
  - c. The "Infill Exemption Environmental Analysis for Clayton Senior Housing" reflects the City's independent judgment and analysis.
- 3. The City Council hereby determines that the Project is Categorically Exempt, under Class 32 Infill Development Projects, from further review pursuant to the California Environmental Quality Act.

(Remainder of page left blank intentionally.)

PASSED, APPROVED and ADOPTED by the City Council of Clayton, California at a regular public meeting thereof held on the 3rd4th day of February March 2020, by the following vote:	
AYES:	
NOES:	
ABSENT:	
ABSTAIN:	
	THE CITY COUNCIL OF CLAYTON, CA
	Julie Pierce, Mayor
ATTEST:	
Janet Calderon, City Clerk	
Exhibit A: Infill Exemption Environmental Analysis for Clayton Senior Housing Project by Raney Planning & Management, Inc.	



WWW.RANEYMANAGEMENT.COM

NORTHERN CALIFORNIA

1501 SPORTS DRIVE SALEA SACRAMENTO, CA 95834

TEL: 916.372.6100 • FAX: 916.419.6108



June 14, 2019

David Woltering Interim Community Development Director City of Clayton 6000 Heritage Trail Clayton, CA

Subject: Infill Exemption Environmental Analysis for Clayton Senior Housing Project

Dear Mr. Woltering:

The City of Clayton retained Raney Planning & Management, Inc. (Raney) to determine whether the Clayton Senior Housing Project satisfies criteria (c) and (d) of the Class 32 Infill Exemption included in the California Environmental Quality Act (CEQA) Guidelines. The specific conditions identified in the Class 32 Infill Exemption in the CEQA Guidelines are as follows (specific emphasis has been added for criteria (c) and (d)):

Class 32 consists of projects characterized as in-fill development meeting the conditions described in this section.

- (a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.
- (b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.
- (c) The project site has no value as habitat for endangered, rare or threatened species.
- (d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.
- (e) The site can be adequately served by all required utilities and public services.

The applicant team prepared several technical studies for the project, which provide information needed to determine whether the project satisfies criteria (c) and (d). To that end, the Raney team performed peer reviews of the applicant-prepared reports to determine their adequacy. The technical reports for the Clayton Senior Housing Project are as follows:

- 6170 High Street/6450 Marsh Creek Road, 6490 Marsh Creek Road Revised Biological Constraints Assessment Survey Results (November 6, 2018), prepared by Olberding Environmental;
- Air Quality & Greenhouse Gas Impact Assessment for the Proposed Clayton Senior Housing Project, Clayton, CA, prepared by Ambient Air Quality & Noise Consulting (September 24, 2018);-
- Noise & Groundborne Vibration Impact Assessment for the Proposed Clayton Senior Housing Project, Clayton, CA, prepared by Ambient Air Quality & Noise Consulting (September 21, 2018); and
- Clayton Senior Housing Trip Generation Study Final Letter (May 8, 2017), prepared by Kimley Horn.

The following section provides a summary of Raney's review of the technical biological, air quality, noise, traffic, and water quality studies.



### Biological

Raney has determined that the methods employed by Olberding Environmental are in general conformance with industry standard practice for biological assessments. For example, the report includes a search of the California Natural Diversity Database (CNDDB) maintained by the California Department of Fish and Wildlife, and reports the special-status species recorded within an extended radius around the project site (presumably 5 miles). The initial peer review comments provided by Raney to the City on September 19, 2018 have been adequately addressed in the final November 6, 2018 report. The report concludes that the project site has no value as habitat for endangered, rare or threatened species, consistent with criteria (c) of Infill Exemption 15332.

#### Air Quality

Raney has concluded that the Air Quality/Greenhouse Gas analysis was completed in accordance with current industry standards, and in compliance with the recommended guidance of the Bay Area Air Quality Management District (BAAQMD). The general methodology of the Technical Memorandum included estimating potential air quality and greenhouse gas (GHG) emissions from construction and operation of the proposed project, using the most-up-to-date version of the California Emissions Estimator Model (CalEEMod) software. To assess the adequacy of the Air Quality/GHG analysis presented in the Technical Memorandum, Raney reviewed the methods, assumptions, and CalEEMod outputs provided by Ambient Consulting. The initial peer review comments provided by Raney to the City on July 20, 2018 and September 7, 2018 have been adequately addressed in the final September 24, 2018 report. The report concludes that the proposed project would result in construction and operational emissions below the BAAQMD's thresholds of significance. Thus, the proposed project would not result in any significant air quality effects, consistent with criteria (d) of Infill Exemption 15332.

#### Noise

Raney hired j.c. brennan & associates, Inc., a noise technical expert, to perform a technical peer review of the project-specific noise and vibration study. j.c. brennan & associates reviewed the report methodology and results and determined that the report was completed in accordance with current industry standards and adequately addresses whether the proposed project would exceed the City of Clayton's General Plan Noise Element and/or Noise Ordinance standards. The report concludes that the proposed project would result in operational noise levels below the relevant City noise thresholds. With respect to construction noise, the report correctly notes that construction activities occurring between the allowable hours specified in Clayton Municipal Code Section 15.01.101 are not subject to the City's noise level thresholds. Per City Ordinance, construction hours for the project would be limited. Thus, the proposed project would not result in any significant noise effects, consistent with criteria (d) of Infill Exemption 15332.

### **Traffic**

Raney consulted with Abrams Associates Traffic Engineering, Inc. to advise on the accuracy of a Trip Generation Study prepared for the proposed project by Kimley Horn. On May 9, 2018, Abrams Associates confirmed that the method of analysis used in the Trip Generation Study was correct, and that the resulting trip estimates are accurate. The Trip Generation Study concludes that the proposed project would generate 16 AM peak hour trips and 19 PM peak hour trips using the ITE Trip Generation Manual. The expected AM and PM peak hour trips are well below the Contra Costa Transportation Authority's 100 peak hour trip threshold for warranting a traffic impact analysis. Additionally, the nearby intersection of Marsh Creek Road/Clayton Road was analyzed and it was determined that the intersection would not be impacted by the relatively small increase in trips in the vicinity. Thus, the proposed project would not result in any significant traffic effects, consistent with criteria (d) of Infill Exemption 15332.

### **Hydrology**

The City Engineer has reviewed the proposed project's potential to significantly effect water quality in the vicinity and has determined that compliance with existing stormwater regulations would ensure no significant adverse water quality effects would occur, as the following will demonstrate. The proposed project would implement the City of Clayton development standards, as well as adhere to all regulations set forth by the Regional Water Quality Control Board, including Section C.3 of the Municipal Regional Storm Water Permit. Additionally, the proposed project would adhere to all requirements for sewerage collection and purveyance of drinking water enforced by the Contra Costa Water District. The City Engineer determined that the proposed project would not introduce any extraordinary issues that would negatively impact water quality on the project site or in the surrounding area. Thus, the proposed project would not result in any significant water quality effects, consistent with criteria (d) of Infill Exemption 15332.

#### Conclusion

As discussed above, the project site does not contain valuable habitat for endangered, rare or threatened species. Based on an air quality analysis conducted for the proposed project, emissions of criteria pollutants associated with the project would not exceed applicable thresholds established by BAAQMD. Additionally, as determined by the technical studies, the proposed project would be consistent with all applicable regulations set forth by the City and Contra Costa County with regard to noise and traffic. Finally, the City Engineer has evaluated the project site plans and determined that the proposed project would not create any significant adverse effects to water quality on the project site or in the surrounding area. Based on the above, the Clayton Senior Housing Project would satisfy the Infill Exemption conditions (c) related to biological resources and (d) related to air quality, noise, traffic, and water quality.

### **Exceptions to Categorical Exemptions**

Even if a project is ordinarily exempt under any of the categorical exemptions, CEQA Guidelines Section 15300.2 provides specific instances where exceptions to otherwise applicable exemptions apply. The following is a discussion of any possible exceptions to the CEQA exemption.

Criterion 15300.2(a): Location - -

This exception only applies to CEQA exemptions under Classes 3,4,5,6, or 11. Since the proposed project qualifies as a Class 32 Infill Exemption, Criterion 15300.2(a) would not apply.

Criterion 15300.2(b): Cumulative Impact

The project site is currently designated Multifamily High Density Residential in the Clayton General Plan and zoned Planned Development. The proposed project is consistent with the site's General Plan and zoning designations. Therefore, impacts of the project have been anticipated by the City and analyzed in the General Plan EIR. Furthermore, the proposed project would not create a significant impact related to modification of habitat for endangered, rare, or threatened species, air quality, noise, traffic, or water quality. Thus, the overall effects of the proposed project would be less than significant and would not contribute to significant cumulative impacts.

Criterion 15300.2(c): Unusual Circumstances

The proposed project would develop a senior housing facility on a project site currently planned for residential development. As discussed above, the Biological Assessment determined that the site does not contain any suitable habitat for endangered, rare, or threatened species; and, such species are not anticipated to occur on-site. Additionally, the project site has not been identified as a source of potentially hazardous materials or waste contamination which could pose a risk to surrounding residents. Based on the above, the project site is not affected by any unusual circumstances. Thus, the exception regarding significant effects on the environment due to unusual circumstances would not apply.

Criterion 15300.2(d): Scenic Highway

The project site would not be located within view of any Officially Designated Scenic Highway. Interstate 680 (I-680), an Officially Designated Scenic Highway, is located approximately 7.5 miles southwest of the project site; however, I-680 would not provide views of the project site. Thus, the exception regarding scenic highways would not apply:

Criterion 15300.2(e): Hazardous Waste Sites

The Cortese List, consisting of databases identified in California Government Code Section 65962.5, was consulted to identify sites with known hazardous materials or waste contamination within or adjacent to the project site; however, none were found. Thus, an exception to the Class 32 exemption based on the presence of a hazardous waste site would not apply.

Criterion 15300.2(f): Historical Resources

The City of Clayton's *Heritage Preservation Task Force Report* includes a list of any potentially historic resources located within the City, including historic resources listed on either the California Register of Historical Resources or the National Register. Based on the Report, the existing on-site structures are not listed as historical resources and the project site does not contain any other structures which are considered historic by the City. In addition, the project site is located within an urbanized area of the City of Clayton and is surrounded by development. Thus, archaeological and paleontological resources are not anticipated be present at or near the project site. Therefore, the exception based on presence of historical resources would not apply.

#### Conclusion

Based on the above discussions, the proposed project would be consistent with the General Plan and zoning designations. Consistency with such would ensure that the project would not result in any cumulative impacts which have not already been anticipated by the City. In addition, the project site does not contain any unusual circumstances. Finally, the project site is not within view of a Scenic Highway, identified as a source of hazardous materials, and does not contain any recorded historic resources. Based on the above, the proposed project would not meet any of the exception criteria for a Class 32 Infill Exemption.

Please contact me at (916) 372-6100 if you have any questions regarding this Infill Exemption analysis.

Sincerely,

Nick Pappani Vice President Raney Planning and Management, Inc.

California Department of Transportation. California Scenic Highway Mapping System Contra Costa County.

Accessed June 2019. Available at: http://www.dot.ca.gov/hq/LandArch/16\_livability/scenic\_highways/.

## Attachment C

Proposed Resolution approving the Affordable Housing Density Bonus Application, Site Plan Review Permit and Tree Removal Permit

### **RESOLUTION NO. YY-2020**

A RESOLUTION GRANTING THE APPEAL AND APPROVING THE AFFORDABLE HOUSING DENSITY BONUS APPLICATION (DBA-01-19), SITE PLAN REVIEW (SPR-04-17), AND TREE REMOVAL PERMIT (TRP-24-17) FOR THE OLIVIA ON MARSH CREEK SENIOR HOUSING PROJECT

## THE CITY COUNCIL City of Clayton, California

WHEREAS, the City received an application from William Jordan requesting review and consideration of an Affordable Housing Density Bonus Application (DBA-01-19), Site Plan Review Permit (SPR-04-17), and Tree Removal Permit (TRP-24-17), and related Environmental Review (ENV-01-17) for development of an 81-unit senior residential project located on three adjacent parcels with a total area of 3.02 acres ("Project"), known as The Olivia on Marsh Creek, located at the southwest intersection of High Street and Marsh Creek Road (Assessor's Parcel Nos. [APNs] 119-021-063, 119-021-055, and 119-021-013); and

WHEREAS, the City commissioned an independent analysis of the Project's eligibility for an Infill Exemption by Raney Planning & Management, Inc., entitled "Infill Exemption Environmental Analysis for Clayton Senior Housing Project," and dated June 14, 2019, which analyzes whether the Project meets all criteria of the Class 32 Infill Exemption as stated in California Environmental Quality Act (CEQA) Guidelines Section 15332; and

WHEREAS, on November 12 and December 10, 2019, the Clayton Planning Commission held duly-noticed public hearings on the Project and received and considered testimony and evidence, both oral and documentary, and

WHEREAS, on December 10, 2019, the Planning Commission, by 3-1 vote, approved a motion to adopt proposed Resolution No. 05-19 determining that the Project is Categorically Exempt from environmental review under Class 32 (Infill Development Projects) of the CEQA Guidelines; and

WHEREAS, on December 10, 2019, the Planning Commission voted 2-2 on a motion to adopt proposed Resolution No. 06-19 approving with conditions the planning entitlements for the project, including an Affordable Housing Density Bonus Application, Site Plan Review Permit, and Tree Removal Permit, resulting in an action of "No Decision";

WHEREAS, on December 30, 2019, Kent Ipsen, the owner of a property adjacent to the subject site, filed an appeal of the Planning Commission approval of the CEQA Categorical Exemption (Class 32, Infill Development Projects) for the proposed project; and

WHEREAS, on January 2, 2020, Dan Hummer, the owner of a property in the vicinity of the subject site, filed an appeal of the Planning Commission approval of the CEQA Categorical Exemption (Class 32, Infill Development Projects) for the proposed project; and

WHEREAS, on January 2, 2020, Irina and Alexander Liskovich, the owners of a property in the vicinity of the subject site, filed an appeal of the Planning Commission approval of the CEQA Categorical Exemption (Class 32, Infill Development Projects) for the proposed project; and

WHEREAS, on January 2, 2020, William Jordan, the Project applicant, filed an appeal of the "No Decision" action on the planning entitlements by the Planning Commission; and

WHEREAS, on February 4 and March 3, 2020, the City Council held anduly noticed public hearings, accepting testimony from the appellant, the applicant and the public, and discussed the appeals and staff's recommended determination of a Class 32 Categorical Exemption (Infill Development Projects) pursuant to the CEQA Guidelines and the recommended conditional approval of the planning entitlements for the project; and

WHEREAS, proper notice of this public hearing was given in all respects as required by law; and

WHEREAS, on February March 34, 2020, the City Council adopted Resolution No. XX-2020 determining that the project is Categorically Exempt from environmental review pursuant to CEOA, under Class 32 (Infill Development Projects) of the CEOA Guidelines.

**NOW THEREFORE, BE IT RESOLVED**, the City Council of Clayton does determine the foregoing recitals are true and correct and makes the following findings for approval of the Project:

Clayton Municipal Code (CMC) Section 17.90.090 and State Density Bonus law state that the City shall grant the concessions or incentives requested by a project applicant unless the City makes a written finding, based upon substantial evidence, of either of the following:

- A. The concession or incentive is not required in order to provide for Affordable Housing Costs;
- B. The concession or incentive would have a specific adverse impact upon public health and safety or the physical environment or on any real property that is listed in the Federal Register of Historical Resources or any locally officially designated architecturally and historically significant buildings and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact without rendering the development unaffordable to Low and Moderate Income households.

The applicant has submitted documentation demonstrating that the two requested concessions are required in order to make the development project economically feasible with inclusion of the affordable units. According to the independent analysis prepared on the applicant's behalf, and subject to a peer review by the City's independent consultant, for the cost savings of the concessions: (1) a reduction in setback requirements for buildings and parking spaces; and (2) a reduction in the required number of parking spaces; the total cost savings makes it possible to offer seven units at reduced rents to Very Low Incomehouseholds.

The City further finds that the requested concessions would not have an adverse impact on public health or safety, the physical environment, or historic resources as defined in Government Code section 65589.5(d)(2). There are no environmentally sensitive areas or historic resources on or adjacent to the project site. With <u>more than</u> one parking space provided per dwelling unit, the project will avoid potential negative impacts related to parking.

**NOW THEREFORE BE IT FURTHER RESOLVED,** the City Council hereby makes the following required findings for approval of a Site Plan Review Permit:

1. That the project is consistent with the General Plan and Town Center Specific Plan designations and policies.

The General Plan designation of the project site is Multifamily High Density (MHD) (20 units per acre), and the Specific Plan designation is Multi-Family High Density Residential (15.1-20 units per acre). These designations are intended to facilitate development of apartments or condominiums, and include affordable housing, two stories or higher in areas of Clayton where higher densities are appropriate, such as near the commercial center. The proposed development is partially within and immediately adjacent to the commercial Town Center of Clayton. The proposed design is complementary to the western design theme of the Town Center Specific Plan. The land use designation allows for maximum structural coverage of 65 percent of the site area. The proposed project is well below this maximum, with lot coverages of 24.1 percent for 6170 High Street, 24.5 percent for 6450 Marsh Creek Road, and 26.1 percent for 6490 Marsh Creek Road.

The policies for the MHD land use designation encourage new development to use "Planned Development concepts and standards, with incorporation of significant design and amenity in the project." The project site is subject to the Planned Development District zoning regulations and corresponding development standards. The project is well designed, with quality building materials, articulated facades, ample open space, diverse and attractive landscaping, and other amenities including outdoor furnishings, bicycle racks and an assigned parking space for each unit.

Due to the project incorporating a density bonus, pursuant to State law and the City's Affordable Housing Density Bonus Requirements Ordinance, it exceeds the 20 unit per acre residential density for the MHD land use designation. Proposed residential density for the project with the bonus units is 26.8 units per acre However, the state Density Bonus Law allows a development project to exceed the maximum density allowed under the General Plan when affordable housing units are included, and the granting of the density bonus shall not require, or be interpreted, in and of itself, to require a general plan amendment. Furthermore, the Density Bonus Law requires the City to approve the project with the additional density, provided that it meets all requirements of the law and does not result in specific adverse impacts as defined in Government Code section 65589.5(d)(2). Thus, in this case, the project is allowed and is consistent with State law and the City's general plan and local regulations (CMC Chapter 17.90) at the proposed density of 26.8 units per acre.

## 2. Meets the standards and requirements of the Zoning Ordinance.

The project meets the requirements of CMC Chapter 17.90, the Affordable Housing Density Bonus Requirements. Eleven percent of the number of 60 residential units allowed under the General Plan are set aside for households meeting the U.S. Department of Housing and Urban Development's (HUD's) definition of Very Low Income. Therefore, the project is entitled to a 35 percent density bonus, equivalent to 21 additional units. The type and size of affordable units reflects the range and sizes of units in the project as a whole (five one- bedroom units and two two-bedroom units are designated as below market rate [BMR]). The units are dispersed throughout the three buildings and are identical in design and construction quality to the market-rate units.

The applicant has submitted all required materials for the Affordable Housing Unit Plan that are listed in CMC Section 17.90.140. A requirement for an Affordable Housing Unit Agreement pursuant to CMC Section 17.90.150 has been included as a Condition of Approval for the project.

In addition, the project complies with the zoning standards of the Planned Development District in CMC Chapter 17.28. As prescribed in CMC Section 17.28.050.B, the applicable development standards are the Multiple Family Residential High Density (M-R-H) District standards in Chapter 17.20. With the exception of minor variations in required setbacks and building height and the reduced parking requirements that are permitted through the granting of concessions and waivers/reductions pursuant to the Density Bonus Law, which shall not require, or be interpreted, in and of itself, to require a zoning change, the project meets the development standards for the M-R-H District.

# 3. Preserves the general safety of the community regarding seismic, landslide, flooding, fire, and traffic hazards.

The project is located on a mostly level site that is not impacted by landslide hazard and is not located in an area at risk of flooding. The project will comply with local and State building codes for seismic safety and fire prevention.

## 4. Maintains solar rights of adjacent properties.

The project is located on a relatively flat site and maintains adequate building setbacks from property lines, thereby avoiding shadow impacts and protecting solar access for adjacent properties.

## 5. Reasonably maintains the privacy of adjacent property owners and/or occupants.

Mature existing trees along the western property line of the subject parcels and along the southern property line of 6490 Marsh Creek Road will be maintained, helping to ensure privacy for adjacent properties to the west and south. In addition, new Oak and Bay trees will be planted along the western property line of 6170 High Street to provide additional

screening. Along the "flagpole" section of 6470 Marsh Creek Road that is located between the two subject parcels at 6450 and 6490 Marsh Creek Road, six-foot high solid wood fencing is proposed to ensure privacy for the former parcel. To reduce intrusion of potential spillover parking from the project into the nearby residential Stranahan subdivision, the developer should be required to contribute funding toward a permit parking program.

6. Reasonably maintains the existing views of adjacent property owners and/or occupants.

The project is located on a relatively flat site and is downhill from the adjacent property to the west. Because of the significant difference in elevation between the subject site (approximate elevation of 400 feet above sea level) and the properties to the west, 6470 Marsh Creek Road and 6061 Clayton View Lane, {approximate elevation of 450 feet above sea level) the proposed buildings will not obstruct views from these neighboring properties to the west. No other properties adjacent to the project site have significant views.

7. Is complementary, although not identical, with adjacent existing structures in terms of design, materials, colors, size, and bulk.

The applicant has requested a waiver of this standard pursuant to the Density Bonus Law. The size and bulk of the proposed buildings (three stories in height) exceed that of many of the existing structures in the surrounding area. However, the topography in the vicinity of the project site, specifically the hill immediately to the west, has the effect of lessening the visual impact of the taller buildings. In addition, variations in exterior wall planes and design articulation of the facades helps to create a less bulky appearance.

Building materials such as smooth hardiplank siding, brick and composition shingle roofing, as well as stone retaining walls, are similar and complementary to the design and rustic character of nearby structures. Proposed exterior colors for the buildings are primarily neutral and natural earth-tones, such as beiges, browns, grays, and brownish shades of red, which are complementary with the character of the surrounding area.

8. Is in accordance with the design standards for manufactured homes per Section 17.36.078. of the CMC.

The project does not include manufactured homes.

9. Proposed tree removal with proposed tree replacement will not adversely impact the health, safety, and general welfare of the residents, while balancing the right of an individual to develop private property per Section 15.70.010 of the CMC.

The applicant is proposing and the City is requiring replacement trees both on-site and off-site with this proposed project.

NOW THEREFORE BE IT FURTHER RESOLVED, the City Council does hereby approve the Affordable Housing Density Bonus Application (DBA-01-19), Site Plan Review Permit (SPR-04-17), and Tree Removal Permit (TRP-24-17) for The Olivia on Marsh Creek Road, an 81-unit senior residential development located on three adjacent parcels with a total area of 3.02 acres, located at the southwest intersection of High Street and Marsh Creek Road (APNs 119-021-063, 119-021-055, and 119-021-013), subject to the following conditions:

## **PLANNING CONDITIONS**

- 1. An Affordable Housing Unit Agreement (AUA) shall be recorded as a restriction on each parcel on which the Affordable Housing units will be constructed in a form acceptable to the City Attorney. The approval and recordation of the AUA shall take place prior to issuance of building permits. The AUA shall be binding on all future owners and successors interest. The AUA shall include, at minimum, but shall not be limited to the following:
  - a. A description of the development, including the total number of units, the number of Affordable Housing Units, and the tenure of the Affordable Housing Units;
  - b. The size, in square footage, and location of Affordable Housing Units;
  - c. A description of the household income group to be accommodated by the Affordable Housing Units, and the formula for determining the monthly rent amount for each Affordable Housing Unit;
  - d. The term of affordability for the Affordable Housing Units;
  - e. A schedule for completion and occupancy of the Affordable Housing Units;
  - f. Provisions and/or documents for rights of first refusal or rental restrictions;
  - g. The Marketing Plan for rental of the Affordable Housing Units;
  - h. Provisions for monitoring the ongoing affordability of the Affordable Housing Units, and the process for qualifying prospective resident households for income eligibility and age qualifications (55 years or older); and
  - i. A description of the concession(s) or incentive(s) provided by the City.
  - j. Specific property management procedures for qualifying and documenting tenant income eligibility, establishing affordable rent and maintaining Affordable Housing units forqualified tenants;
  - k. Provisions requiring property owners to verify household incomes and maintain books and record to demonstrate compliance with this chapter;
  - 1. Provisions requiring the Property Owner to submit an annual report to the city, which includes the name(s), address, and income of each household occupying target units, and which identifies the bedroom size and monthly rent or cost of each Affordable Housing unit;
  - m. Provisions describing the amount of, and timing for payment of,
    Administrative Fees to be paid to the City for the mandated term of
    compliance monitoring in accordance with the provisions of this chapter;
    and

- n. Any additional obligations relevant to the compliance with Chapter 17.90 of the Clayton Municipal Code, *Affordable Housing Density Bonus Requirements*.
- 2. The project is subject to development impact fees. The applicant shall be responsible for all fees and environmental review costs, including those charged by the California Department of Fish and Wildlife.
- 3. Any major changes to the project as determined by the Community Development Director shall require Planning Commission review and approval. Any minor changes to the project as determined by the Community Development Director shall be subject to City staff review and approval.
- 4. No permits or approvals, whether discretionary or mandatory, shall be considered if the applicant is not current on fees, reimbursement payments, and other fees that are due.
- 5. Parking spaces shall be assigned to specific residential units. Each unit shall have one (1) assigned parking space. The number and location of the assigned parking space shall be stated in the rental agreement for each unit.
- 6. The applicant shall execute a shared parking agreement between 6170 High Street and 6450 Marsh Creek Road allowing for three (3) resident parking spaces and one (1) guest parking space for 6170 High Street to be located on the 6450 Marsh Creek Road parcel. The shared parking agreement shall be recorded on the deed for each parcel and shall be in a form acceptable to the City Attorney.
- 7. Prior to issuance of a building permit, the applicant shall assure there is a recorded easement in a form acceptable to the City Attorney between Site 1 and Site 2 for pedestrian access between parking lot areas.
- 8. Prior to the commencement of grading, demolition, or construction activities, the applicant shall submit a recycling plan for construction materials to the City for review and approval. The plan shall include that all materials that would not be acceptable for disposal in the sanitary landfill be recycled/reused. Documentation of the material type, amount, where taken, and receipts for verification and certification statements shall be included in the plan. The applicant shall submit deposits to the City to ensure good faith efforts of construction and demolition recycling. A deposit of \$2,000 per residence shall be submitted prior to issuance of the building permit for each residence, or demolition permit. Appropriate documentation regarding recycling shall be provided to the City. All staff costs related to the review, monitoring, and enforcement of this condition shall be charged to the deposit account.
- 9. Prior to issuance of demolition permits for on-site structures, the applicant shall show compliance with the NPDES Municipal Regional Permit (MRP 2.0) issued by the San Francisco Regional Water Quality Control Board regarding Mercury

control and disposal. Building and site assessment shall be conducted to determine if any Mercury-containing devices (i.e. thermostats, etc.) or sources exist. If the assessment Identifies any Mercury-containing devices or equipment, the devices or equipment shall be properly removed and disposed of at an acceptable recycling facility or landfill, so that demolition activities do not result in Mercury being scattered on site or entering storm drains. Where applicable, documentation of site assessment and proper disposal shall be provided to the Community Development Department prior to the issuance of any new construction permit.

- 10. Prior to the issuance of demolition permits, the applicant shall show compliance with the NPDES Municipal Regional Permit (MRP 2.0) issued by the San Francisco Regional Water Quality Control Board regarding polychlorinated biphenyl (PCB) control and disposal. The applicant shall ensure proper management of potential PCB-containing materials and wastes during building demolition and disposing of PCB properly, so that demolition activities do not result in PCB entering storm drains. Prior to issuance of demolition permits, the applicant shall submit to the Community Development Department an analysis of the existing structures having PCB concentrations below 50 parts per million (ppm), or provide written documentation and evidence as to the type and style of all structures to be demolished that are single-family residential and/or wood frame structures. If the applicant is unable to obtain compliance by either of these measures, the applicant shall abate any PCB at or above 50 parts per billion (ppb) in accordance with an approved disposal plan to be submitted to the Community Development Department prior to issuance of demolition permits.
- 11. At least thirty (30) days prior to any demolition or groundbreaking activities, the applicant shall retain an exterminator who shall evaluate the site and make recommendations for the control and/or eradication of any on-site rodents. The exterminator's recommendations shall be subject to the review and approval of the Community Development Director. The applicant shall comply with the approved exterminator's recommendations prior to initiation of any demolition or groundbreaking activities.
- 12. The applicant agrees to indemnify, protect, defend, and hold harmless the City and its elected and appointed officials, officers, employees, and agents from and against any and all liabilities, claims, actions, causes, proceedings, suits, damages, judgments, liens, levies, costs, and expenses of whatever nature, including attorney's fees and disbursements arising out of or in any way relating to the issuance of this entitlement, any actions taken by the City relating to this entitlement, or the environmental review conducted under the California Environmental Quality Act for this entitlement and related actions. In addition, if there is any referendum or other election action to contest or overturn these approvals, the applicant shall either withdraw the application or pay all City costs for such an election.

### **GENERAL CONDITIONS**

- 13. The project shall comply with the Clayton Municipal Code. All construction shall conform to the requirements of the California Building Code and City of Clayton standards.
- 14. The project shall be implemented as indicated on the application form and accompanying materials provided to the City and in compliance with the Clayton Municipal Code, or as amended by the Planning Commission.
- 15. No building permit will be issued unless the plan conforms to the project description and materials as approved by the Planning Commission and the standards of the City.
- 16. This approval expires two years from the date of approval (expires \_\_\_\_\_\_, 2021), unless a building permit has been issued and construction has diligently commenced thereon and has not expired, or an extension has been approved by the Planning Commission. Requests for extensions must be received in writing with the appropriate fees prior to the expiration of this approval. No more than one, one-year extension shall be granted.
- 17. This approval supersedes previous approvals, if any, that have been granted for this site.
- 18. The general contractor shall install and maintain the erosion and sedimentation control devices around the work premises per the most current NPDES Municipal Regional Permit (MRP). Current MRP Is 2.0 and upcoming permit will be MRP-3.0.
- 19. All required easements or rights-of-way shall be obtained by the applicant at no cost to the City of Clayton. Advance permission shall be obtained from any property owners or easement holders for any work done within such property or easements.
- 20. Prior to issuance of the certificate of occupancy for each property, the public Improvement for that property including streets, sewers, storm drains, street lights, and traffic signs required for access to the site shall be completed to the sole satisfaction of the City Engineer or City Traffic Engineer.
- 21. City staff shall inspect the site for compliance with conditions of approval and approved plans prior to final inspection approval.
- 22. The applicant shall obtain an encroachment permit for all work to be done within the public right-of-way or easement, and peak commute-hour traffic shall not be impeded by construction-related activity. All on-site improvements not covered by the building permit including walkways, driveways, paving, sewers, drainage, curbs, an gutters must be constructed in accordance with approved plans and/or standards and a Site Development Permit approved by the City Engineer.

- 23. All existing easements shall be identified on the site plan and all plans that encroach into existing easements shall be submitted to the easement holder for review and approval, and advance written permission shall be obtained from any property owner or easement holder for any work done within such property or easement.
- 24. Building permits for retaining walls shall be obtained as follows:
  - a. For major walls over three feet in height to be constructed during the mass grading phase, obtain a building permit prior to issuance of the grading permit.
  - b. For all other walls, obtain a building permit prior to issuance of permits for structures on the respective lot in accordance with the applicable California Building Code Standards.

## NOISE CONTROL, DUST AND CONDITIONS FOR CONSTRUCTION ACTIVITY

- 25. An encroachment permit is required for all work in the public right-of-way. Restoration of existing improvements (curb, gutter, sidewalk, street section, etc.) shall be to the City of Clayton standards and as approved by the City Engineer.
- 26. The use of construction equipment shall be restricted to weekdays between the hours of 8:00 a.m. and 5:00 p.m., or as approved in writing by the City Manager.
- 27. The project shall be in compliance with and supply all the necessary documentation to comply with the City of Clayton Construction and Demolition Debris Recycling Program.
- 28. Driveway access to neighboring properties shall be maintained at all times during construction.
- 29. Standard dust control methods shall be used to stabilize the dust generated by construction activities in accordance with the Bay Area Air Quality Management District standards.
- 30. The site shall be fenced with locked gates by 7:00 p.m. The gates shall remain locked until 7:00 a.m. Contractors shall not arrive at the site prior to the opening of the gates. The name and contact information shall be placed at locations on the site for neighbors to contact in the circumstance there is a concern that needs to be addressed to the satisfaction of the City Engineer.
- 31. All construction equipment utilizing combustion engines shall be equipped with "critical" grade (rather than "stock" grade) noise mufflers or silencers that are in good condition. Back up "beepers" shall be tuned to insure lowest possible noise levels while also serving the safety purpose of the backup sound indicator.

- 32. Stationary noise sources shall be located at least 300 feet away from any occupied residential or business dwellings unless noise-reducing engine housing enclosures or other appropriate noise screens are provided.
- 33. Speeds of construction equipment shall be limited to 10 miles per hour (mph). This includes equipment traveling on local streets to and from the site.
- 34. Access shall be maintained to all driveways at all times.
- 35. There shall be no parking of construction equipment or construction worker's cars on residential or business streets at any time. A staging area shall be secured prior to issuance of a grading or building permit as determined necessary by the City Engineer.
- 36. Truck routes for the import or export of cut/fill material shall be identified and approved by the City Engineer prior to the issuance of any permits. Applicant shall be responsible for the repair of any damage to City streets (private and public) caused by the contractor's or subcontractor's vehicles.
- 37. Prior to construction, applicant shall ensure that the contractor shall contact City inspector for a pre-construction meeting. Haul route shall be submitted for review and approval by the City Engineer.
- 38. All construction activities must be designed to minimize potential spills from equipment and to provide a planned response in the event an accidental spill occurs. The applicant shall maintain spill equipment on site; there shall be a designated area if refueling takes place on site. Applicant shall insure all construction personnel are trained in proper material handling, cleanup and disposal procedures.
- 39. Prior to any demolition activities, a demolition permit shall be obtained and all demolition activities be performed in accordance with the Bay Area Air Quality Management District Regulation 11 Hazardous Pollutants, Rule 2 Asbestos Demolition, Renovation, and Manufacturing. The purpose of this Rule is to control emissions of asbestos to the atmosphere during demolition, renovation, milling and manufacturing and establish appropriate waste disposal procedures. These requirements specify the appropriate methods for survey, demolition/removal, and disposal of asbestos materials to control emissions and prevent hazardous conditions. Specifications developed for the demolition activities shall include the proper packaging, manifesting and transport of demolition wastes by trained workers to a permitted facility for disposal in accordance with local, State, and Federal requirements.
- 40. Prior to demolition or renovation activities that may disturb suspected lead based paint (LBP), actual material samples shall be collected or an XRF survey performed in order to determine if LBP is present. It should be noted that construction activities that disturb materials or paints containing any amount of

lead are subject to certain requirements of the Occupational Safety and Health Administration (OSHA) lead standard contained in 29 CFR 1910.1025 and 1926.62. If lead-based paint is identified, the paint shall be removed by a qualified lead abatement contractor. Specifications developed for the demolition activities shall include the proper packaging, manifesting, and transport of demolition wastes by trained workers to a permitted facility for disposal in accordance with local, State, and Federal requirements.

### PROPERTY MAINTENANCE

- 41. A parking lot sweeping program shall be implemented that, at a minimum, provides for sweeping immediately prior to the storm season and prior to each storm event.
- 42. The site shall be kept clean of all debris (litter, boxes, junk, garbage, etc.) at all times.
- 43. No signs shall be installed on this site without prior City approval.
- 44. Any undeveloped areas on-site shall be maintained in an attractive manner that ensures fire safety and prevents any runoff onto the adjacent sidewalks.

## **AGENCY REQUIREMENTS**

45. Applicable requirements of other agencies including, but not limited to the Contra Costa County Fire District, the Contra Costa Water District, City of Concord (Sanitation), and the East Contra Costa County Habitat Conservancy shall be met.

### **FEES**

- 46. The applicant shall pay all fees required by the City Council and other applicable agencies.
- 47. The applicant shall pay all required fees at the time of building permit issuance.

### **GRADING**

- 48. All grading shall be required grading and drainage plan prepared by a registered Civil Engineer, a soils report prepared by a registered Geotechnical Engineer and a Grading Permit approved by the City Engineer. The grading plans and soils report shall require review by the City's geotechnical consultant with all costs to be borne by the applicant.
- 49. All recommendations made in the Soil Engineers report (unless amended through the City's review) and all recommendations made by the City's geotechnical consultant shall be incorporated into the design and construction of the project.

- 50. Contour grading techniques with spot elevations shall be employed throughout the project to achieve a more natural appearance, even where this will increase the amount of grading.
- 51. Tops of cuts or toes of fills adjacent to existing public rights-of-way or easements shall be set back two feet minimum from said rights-of-way and easements.
- 52. Erosion control measures shall be implemented by the applicant per plans approved by the City Engineer for all grading work not completed before October 1. At the time of approval of the improvement and/or grading plans, an approved Erosion Control Plan prepared by a registered Civil Engineer shall be filed with the City Engineer.
- 53. All graded slopes in excess of 5 feet in height shall be hydroseeded no later than September 15 and irrigated (if necessary) to ensure establishment prior to the onset of the rainy season
- 54. The applicant's engineer shall certify the actual pad elevation for the lot in accordance with City standards prior to issuance of Building Permit.
- 55. Any grading on adjacent properties will require written approval of those property owners affected.
- 56. If cultural resources are discovered during subsurface excavations, the Contractor shall cease construction and a qualified archeologist shall be contacted to make recommendations for mitigation.
- 57. The plans shall include the boundary treatment shown on cross sections, drawn to scale, for retaining walls, fencing and drainage.
- 58. All elevations shown on the grading and improvement plans shall be on the USGS 1929 sea level datum or NAVD 88 with conversion information, or as approved by the City Engineer.

## UTILITIES

- 59. In the circumstance the applicant or successor-in-interest applies to convert the project from a rental apartment project to a condominium subdivision, the applicant or successor-in-interest shall be required to underground all existing and proposed utilities in accordance with the applicable provisions of the Clayton Municipal Code (CMC) at that time.
- 60. Trash enclosures shall drain to sanitary sewer and shall incorporate methods to contain runoff at the front-gate and pedestrian access point to prevent storm water from entering the enclosure.

- 61. The sewer collection system shall be constructed to function as a gravity system. Sanitary sewer collection system shall be constructed to the standards of the City of Concord and Central Contra Costa Sanitary District. Inspections of sanitary sewer collection system shall be performed by City of Concord under contract to City of Clayton.
- 62. Water system facilities shall be designed to meet the requirements of Contra Costa Water District and the fire flow requirements of the Contra Costa County Fire Protection District. All requirements of the responsible agency shall be guaranteed prior to approval of the improvement plans. Any required offsite easements shall be obtained by the applicant at his/her own expense.
- 63. A reduced pressure backflow preventer assembly shall be installed on all water meter services.
- 64. Double detector check fire line backflow assemblies shall be enclosed within an easement granted to Contra Costa Water District, as needed, and at no cost to the City or the District.
- 65. The applicant shall provide adequate water pressure and volume to serve this development, as approved by the City Engineer. This will include a minimum residual pressure of 20 pounds per square inch (psi) with all losses included at the highest point of water service and a minimum static pressure of 50 psi.
- 66. All onsite utilities shall be privately maintained and connected to public facilities in accordance with City and applicable agency standards, as approved by the City Engineer.
- 67. All sanitary sewer system connections and improvements shall be submitted for reviewed and approved by the City Engineer and review and comment by the City of Concord (Sanitation).

## DRAINAGE AND WATER QUALITY

- 68. For projects disturbing one (1) acre or more, the applicant shall comply with the State Construction General Permit requirements. The applicant shall be responsible for preparing the Stormwater Pollution Prevention Program (SWPPP), submit all required documents, and obtaining coverage by filing a Notice of Intent (NOI) with State Water Resource Control Board (SWRQB).
- 69. A copy of the SWPPP and the Notice of Intent (WDID) shall be submitted to the City prior to issuing permits for construction. The SWPPP and the WDID shall be kept at the job site during construction. The WDID number shall be included onto the cover sheet of the Grading Plans for the project.
- 70. Prior to approval of the grading plans, the applicant shall submit a drainage study to the City for review and approval, and to the Contra Costa County Flood

- Control and Water Conservation District (FC District) for review and comment. The applicant shall be responsible to pay directly for the agency's review.
- 71. Applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Permit (MRP) of the State Regional Water Resources Control Board NPDES Permit as applicable to this project.
- 72. Stormwater control facilities (C.3 facilities) shall be maintained and operated by the applicant/property owner, in perpetuity, in accordance with the Operation and Maintenance Plan. The applicant/property owner shall provide periodic and annual inspection reports.
- 73. Applicant shall submit a comprehensive Stormwater Control Plan, construction plans, details, and calculations in accordance with the current Contra Costa Clean Water Program (CCCWP) C.3 Guidebook. Required offsite improvements and street(s) frontage improvement work shall be considered and included as a part of this project for compliance with C.3 requirements The Stormwater Control Plan watershed drainage map shall include all impervious surface locations (i.e. streets, buildings, parking lots, walkways, etc.) to be used in the calculations for sizing C.3 facilities.
- 74. CCCWP C.3 online calculator shall be used in determining the size of the required C.3 facilities. Submit a printout and attach a copy in the Stormwater Control Plan.
- 75. Bio-retention basin side slopes shall not be steeper than 3H:1V.
- 76. Using C.3 bio-retention basin(s) as a detention basin(s) for the mitigation of increased peak flows shall be subject to the City Engineer's approval. If approved by the City Engineer, applicant shall submit hydrology and hydraulic study, calculations, and details to demonstrate compliance with the C.3 requirements as well as flood control requirements. Detention basin(s) design parameters and the calculations shall also be in accordance with Contra Costa County Flood Control guidelines.
- 77. Prior to City Approval of the plans and issuance of permits, the applicant shall submit a signed operation and maintenance agreement. The agreement shall be the City's standard form and subject to the review and approval by the City.
- 78. All storm water flows shall be collected onsite and discharged into an approved public storm drain system. No onsite drainage is allowed to flow over the sidewalk.
- 79. Applicant shall not increase storm water runoff to adjacent downhill lots unless either: (1) a Drainage Release is signed by the property owner(s) of the affected downhill lots and recorded in the office of the County Recorder; or (2) site drainage is collected and conveyed in approved drainage facilities within a

private drainage easement through a downhill property. This condition may require collection of on-site runoff and construction of an off-site storm drainage system. All required releases and/or easements shall be obtained prior to issuance of any building permits.

80. A structure shall be installed at all pipe intersections, change of direction, or change in slope as approved by the City Engineer.

## STREET IMPROVEMENTS

- Sidewalks, curb, gutter, sidewalk and street pavement shall be constructed and/or replaced (if cracked, broken or damaged) in the public right-of-way along the entire project frontage as required by the City Engineer and at no cost to the City. Driveway aprons shall be removed and/or replaced with new curb, gutter and sidewalk to match the proposed development. Corner curb ramps (handicap ramps) that do not meet current Federal ADA and State Title 24 Standards shall be replace to current standards. Existing street pavement section shall be removed and replaced along the frontage of the property to the centerline of the street if the section is cracked or damaged in any way (regardless if it is damaged by project construction or not), or other roadway preservation methods as approved by the City Engineer. All required public easements or rights-of-way shall be offered to the City. All improvements shall be designed and constructed to the satisfaction of the City Engineer.
- 82. All streets shall be paved and improved after utilities are installed in accordance with the City of Clayton Standard Drawings and Design Guidelines and the approved plans.

### LANDSCAPING

- 83. Sight distance triangles shall be maintained per Chapter 12.08 of the CMC, Site Obstructions at Intersections, or as approved by the City Engineer. Landscaping and signage shall not create a sight distance problem.
- 84. Detailed landscaping and irrigation plans for the entire site shall be submitted to the City for review and approval. All landscaping and irrigation shall be installed in accordance with approved plans prior to the issuance of certificates of occupancy for this building.
- 85. Landscaping for the project shall be designed to comply with the applicable requirements of City of Clayton Municipal Code. The State Model Water Efficient Landscape Ordinance (MWELO). Prior to issuance of a building permit, the applicant shall demonstrate compliance with the applicable requirements of the MWELO in the landscape and irrigation plans submitted to the City.
- 86. Landscape shall show immediate results. Landscaped areas shall be watered, weeded, pruned, fertilized, sprayed, and/or otherwise maintained as necessary.

Plant materials shall be replaced as needed to maintain the landscaping in accordance with the approved plans. Plant material selection shall avoid plant species that are known to be susceptible to disease (e.g., Platanus Blood Good) or drop fruit on hard surfaces and walkways causing a maintenance or safety concern.

87. All trees shall be a minimum 15-gallon size and all shrubs shall be a minimum 5-gallon size.

### PROJECT SPECIFIC CONDITIONS

- 88. Any cracked or broken sidewalks shall be replaced as required by the City Engineer.
- 89. All rooftop mechanical equipment shall be screened from the public right-of-way and the residential properties to the west of the subject property. A line of sight study shall be submitted with the building permit submittal confirming the equipment is screened.
- 90. Asphalt paving shall have a minimum slope of two percent (2%), concrete paving shall have a minimum slope of 0.75%, except asphalt paving for identified accessible parking stalls and access routes shall have a minimum slope of 1.5% and a maximum slope of 2%, or as approved by the City Engineer.
- 91. All on-site curbs, gutters and sidewalks shall be constructed of Portland cement concrete.
- 92. All walkways adjacent to parking areas with vehicle overhang shall be a minimum of six and a half  $(6\frac{1}{2})$  feet wide.

## TREE PROTECTION CONDITIONS

- 93. The following construction policies and guidelines for tree preservation and protection put forth by the City of Clayton shall be followed during project implementation:
  - a. The applicant shall submit for the review and approval of the Community Development Director a tree protection plan to identify the location of the tree trunk and dripline of all on- and off-site trees subject to City of Clayton Municipal Code Section 15.70.020.
  - b. A protective fence shall be installed around all trees subject to the tree protection plan. The protective fence shall be installed prior to commencement of any construction activity and shall remain in place for the duration of construction.
  - c. Grading, excavation, deposition of fill, erosion, compaction, and other construction-related activities shall not be permitted within the dripline or at locations which may damage the root system of trees subject to the tree protection plan, unless such activities are specifically allowed by the

- tree protection plan. Tree wells may be used if specifically allowed by the tree protection plan.
- d. Oil, gas, chemicals, vehicles, construction equipment, machinery, and other construction materials shall not be allowed within the dripline of trees subject to the tree protection plan.
- 94. Trees which are identified for preservation, and are subsequently removed during construction, shall be replaced by new trees or shall be required to pay an in-lieu fee equal to 200% of the value (as established by the International Society of Arboriculture) of the original tree(s) to be preserved.
- 95. The Community Development Department shall review and approve grading and improvement plans to ensure adequate measures are taken to protect trees.

## LANDSCAPING CONDITIONS

- 96. The project shall comply with all applicable requirements and regulations as they pertain to the Landscape Water Conservation Standards and the Water Efficient Landscape Ordinance.
- 97. Three sets of the landscape and irrigation plans shall be submitted with the grading and improvement plans for review and approval by the Community Development Department, Engineering Department, and the Maintenance Department. These plans shall be prepared by a landscape architect.
- 98. Installation of all irrigation and landscaping shall be performed by a licensed contractor. Open trench inspection of the irrigation installation in areas to be maintained by the City is subject to approval of the Maintenance Department. Prior to the final inspection by the Maintenance Department, the installation shall be approved by the landscape architect.
- 99. All trees shall be planted at least ten {10} feet away from any public water, sewer, or storm drain lines, unless a closer location is approved by the City. All trees shall be installed with support staking. All nursery stakes must be removed from trees. All trees planted within eight (8) feet of a sidewalk or driveway shall be installed with root guards.

### **EXPIRATION CONDITIONS**

100. The Tree Removal Permit (TRP-24-17) shall expire simultaneously with the expiration of the Site Plan Review Permit (SRP-04-17), pursuant to the permit expiration provisions listed in Chapter 17.64 of the Clayton Municipal Code.

## **GENERAL CONDITIONS**

101. The applicant shall obtain the necessary approvals from the Contra Costa County Fire Protection District.

- 102. The applicant shall provide an adequate and reliable water supply for fire protection as set forth in the Uniform Fire Code.
- 103. The access driveway/roadway and turnaround improvements must be completed and inspected by the Contra Costa County Fire Protection District (CCCFPD) prior to construction on the two residential lots.
- 104. All proposed residences are required to be protected with an approved automatic fire sprinkler system complying with the 2013 edition of NFPA 130 or Section R313.3 of the 2013 California Residential Code. A minimum of two (2) sets of sprinkler plans shall be submitted to the CCCFPD for both residences for review and approval prior to installation.
- 105. Additional requirements may be imposed by the CCCFPD. Before proceeding with the project, it is advisable to check with the CCCFPD located at 4005 Port Chicago Highway, Concord, 925-941-3300.
- 106. The applicant shall comply with all applicable State, County, and City codes, regulations, and standards as well as pay all associated fees and charges.
- 107. All construction and other work shall occur only between 7:00 a.m. and 5:00 p.m. Monday through Friday. Any such work beyond these hours and days is strictly prohibited unless specifically authorized in writing by the City Engineer (Clayton Municipal Code Section 15.01.101).
- 108. The applicant shall obtain the necessary building permits from the Contra Costa County Building Inspection Department. All construction shall conform to the California Building Code.
- 109. Prior to issuance of a Certificate of Occupancy for any residential building, the applicant shall install security cameras to monitor primary individual building entries and parking areas with the ability to archive and monitor the imaging to the satisfaction of the Chief of Police.
- 110. In the circumstance the applicant or successor-in-interest applies to convert the rental apartment project to a condominium subdivision, the applicant or successor-in-interest shall pay Quimby Act fees in accordance with applicable provisions of the Clayton Municipal Code (CMC) and City adopted fee schedule in effect at that time.
- 111. The applicant shall prepare a property maintenance program to address on-going building maintenance, landscaping, parking lot maintenance, and tenant maintenance responsibilities to the satisfaction of the City Attorney.
- 112. Prior to issuance of a City demolition and/or grading permit the applicant shall complete a Green Infrastructure Feasibility analysis, as required by the San

Francisco Rational Water Quality Control Board in MRP 2.0, to determine opportunities to address existing frontage runoff into planned or new bioretention areas behind the back of curb. If such analysis determines these are feasible, any Green Infrastructure shall be maintained by the abutting property owner in perpetuity.

- 113. The applicant is advised this project is subject in perpetuity to the required (annual) Operations and Maintenance inspections by the City for the C.3 facilities at the costs established and updated annually in the City Fees and Charges Schedule.
- 114. The trash enclosures shall have solid metal doors, a solid roof and ventilation. The proposed trash enclosures need to be enlarged in order to have internal clear dimensions that are adequate to accommodate the required refuse and recycling dumpsters/containers and resident accessibility to utilize them. The trash enclosures must be located in close proximity to the access driveway near the public right-of-way to the satisfaction of Republic Services and the City Engineer to assure accessibility for trash removal and adequate sight distance to assure the public the safety.
- 115. All landscaping along Marsh Creek Road and along High Street behind the back of curb shall be maintained by the abutting property owner in perpetuity.
- 116. Prior to the issuance of the first building permit for the project Certificate of Occupancy, the applicant shall submit plans for plan check that show a minimum of 106 off-street parking stalls for the project (minimum 31 stalls at 6170 High Street, minimum 37 stalls at 6450 Marsh Creek Road and minimum 38 stalls at 6490 Marsh Creek Road), consistent with the revised site plans approved by this resolution obtain City Council approval of and contribute up to \$20,000 to establish a Permit Parking Program System for the Stranahan Subdivision located across Marsh Creek Road to the east of the project to limit possible spillover parking from outside that neighborhood to the satisfaction of the City Engineer and Chief of Police].
- 117. Following the City's identification of an appropriate project, and Pprior to the issuance of the first Certificate of Occupancy, the applicant shall pay \$5,000 to the City toward the cost of installation of multimodal safety improvements and traffic calming measures on Marsh Creek Road in the vicinity of the project site. install electronic speed indicator signage on Marsh Creek Road in the vicinity of the intersection of Marsh Creek Road and Stranahan Circle to facilitate reducing speeding in this area to the satisfaction of the City Engineer and Chief of Police.
- <del>118.</del>
- 119. Prior to the issuance of the first Certificate of Occupancy the applicant shall install pedestrian activated crosswalk flashers at the trail crosswalk south of the project site on Marsh Creek Road to facilitate pedestrian safety to the satisfaction of the City Engineer.

- 120.117. The property owner shall provide annual bus passes for up to two years to the tenants in the development and establish a car share program to facilitate reducing on-site parking demand to the satisfaction of the Community Development Director. Bus passes shall only be offered to tenants who request passes and provided for up to two years to tenants who demonstrate actual usage thereof.
- 121.118. Prior to the issuance of the first Certificate of Occupancy the applicant shall pay \$2,500 to the City as its sole contribution to the City's general interest in and efforts to plant provide and install fifty 15 gallon trees at an off-site location within the City of Clayton to increase carbon absorption to the satisfaction of the City Maintenance Supervisor and City Manager.

**PASSED, APPROVED and ADOPTED** by the City Council of Clayton, California at a regular public meeting thereof held on the 3<sup>rd</sup> 4<sup>h</sup> day of February March 2020, by the following vote:

AYES: NOES: ABSENT: ABSTAIN:		
		THE CITY COUNCIL OF CLAYTON, CA
r		
		Julie Pierce, Mayor
ATTEST:		
Janet Calderon, City Clerk	_	

# **Attachment D**

# Weblinks to Previous Staff Reports and Attachments:

February 4, 2020, City Council Meeting

https://ci.clayton.ca.us/fc/agendas/council/020420%20p acket.pdf? t=1580343408

December 10, 2019, Planning Commission Meeting

https://ci.clayton.ca.us/fc/agendas/planning/121019a.pd f? t=1575714578

November 12, 2019, Planning Commission Meeting

https://ci.clayton.ca.us/fc/agendas/planning/11121 9a.pdf

The Olivia at Marsh Creek Appeals City Council Hearing, March 3, 2020

# **Attachment E**

Minutes Excerpt from the February 4, 2020 City Council Meeting

## 5. **RECOGNITIONS AND PRESENTATIONS** – None.

# 6. REPORTS

- (a) Planning Commission No meeting held.
- (b) Trails and Landscaping Committee No meeting held.
- (c) City Manager/Staff -

Mayor Pierce announced the arrival of a baby boy for City Manager Ikani Taumoepeau.

City Manager Taumoepeau announced the City of Clayton has a new Facebook page, four applications were received for the Trails and Landscaping Committee, and announced Chief Warren was here this evening to provide a brief report.

Chief Warren provided a highlights of Police activity in January 2020; further advising the public it is very important to lock their vehicles and residential doors to help prevent theft.

(d) City Council - Reports from Council liaisons to Regional Committees, Commissions and Boards.

Councilmember Catalano indicated no report.

Vice Mayor Wan announced today is his son's 11<sup>th</sup> birthday.

Councilmember Wolfe attended the all City staff meeting, met with constituents, the Library 25<sup>th</sup> Birthday Party meeting, met with the Clayton Business and Community Association Chair for the upcoming BBQ in July, and attended the Closed Session earlier this evening.

Councilmember Diaz attended the all City staff meeting, the League of California Cities East Bay division meeting, met with the City Manager, and the Clayton Business and Community Association Art and Wine Committee meeting.

Mayor Pierce attended the all City staff meeting, the Bay Area Regional Collaborative meeting, the Housing Methodology Committee meeting, the Association of Bay Area Governments and Metropolitan Transportation Commission Workshop, and an Eagle Court of Honor for four young men.

- (e) Other None.
- 7. PUBLIC COMMENT ON NON AGENDA ITEMS None.

# 8. PUBLIC HEARINGS

(a) City Council to consider Appeals of the Planning Commission's Decisions Regarding the Olivia at Marsh Creek Project pursuant to Clayton Municipal Code section 17.68.030.

Mayor Pierce asked the City Council to disclose any Ex Parte conversations they may have had regarding this item.

Councilmember Catalano asked the applicant if he had ever engaged herself or law firm to work on this particular project? Mr. Jordan answered no.; Have you ever had a client relationship with herself or her law firm? Mr. Jordan answered no; Have you ever paid herself or anyone at her law firm for any legal advice? Mr. Jordan answered no; Have you or I ever had a conversation? Mr. Jordan answered no. Councilmember Catalano further advised the Council is subject to Conflict of Interest Laws that focus primarily on whether any particular governmental decision could have a financial benefit to any of the decision makers. She noted she does not have financial interest in this project.

Vice Mayor Wan believes he and Mr. Jordan had a conversation back in August 2018 at a campaign event and a phone conversation with one of the appellants.

Councilmember Wolfe has not had a conversation with either the applicant or appellants.

Councilmember Diaz advised he called each appellant and applicant discuss their specific appeal for personal understanding of each.

Mayor Pierce stated she read social media posts and has not met with the developer or appellants. She further advised of the meeting process for this evening.

Interim Community Development Director Dana Ayers presented the staff report.

Kent Ipsen expressed his concerns regarding inconsistent answers he has received from temporary City staff. Mr. Ipsen is extremely concerned that the overall project does not meet the Class 32 exemption and is being "Piecemealed".

Dan Hummer Stranahan Circle, would have preferred to have information presented this evening prior to this evenings meeting to prepare a better response. Mr. Hummer expressed several concerns on this project: not meeting CEQA requirements, condo conversion, inadequate parking and pedestrian safety.

Irina Liskovich felt the staff presentation did not address her concerns stated in her appeal. Ms. Liskovich advised her issue is regarding overall safety on Stranahan Circle concerning traffic, safety of children, and fire danger.

Bill Jordan advised he has brought his CEQA and Land Use Attorney who will be speaking about the appeals Mr. Steve Velyvis with Burke, Williams, and Sorensen, LLP.

Mr. Velyvis spoke about the density bonus law and housing accountability act which essentially limits discretion. Mr. Jordan's appeal is to overturn the Planning Commission decision as staff described as a no decision, and remove certain five conditions of approval, and requested the City Council to find the project exempt as Class 32 for infill development. Mr. Velyvis also noted the Raney Planning was hired by the City to conduct a review of the reports (noise, air, traffic and water) objectively; concluding all the criteria for the exemption could be met. Mr. Velyvis addressed Mr. Ipsens concern regarding "Piecemealing"; the Hoyer parcel is not included in the project site, or part of the application and no current development

plans for that parcel are associated with Mr. Jordan's project. He also addressed Mr. Hummers appeal regarding the need of 81 units to make the project financially feasible; if the five conditions of approval are imposed on the project, it will create a significant financial burden as it would result in a reduction in density for the project. Mr. Velyvis also addressed Ms. Liskovich's appeal was based on traffic hazards, not parking issues on Stranahan which is not a direct CEQA impact. Mr. Velyvis concluded on why the project should be approved with density bonus concessions and waivers that have been requested.

Mayor Pierce opened matter for public comments.

Susan Allen expressed her concerns regarding the safety of children, traffic congestion and overflow parking. She requested the City Council to not approve this project.

Brian Buddell expressed his concerns with the zoning of this project and urged the City Council to oppose.

John Nunes believes this project is very convenient and safe for Senior Citizens while maintaining their independence. He also added many projects have issues with parking.

Marci Longchamps, Coyote Circle, requested the City Council to "Do the Right Thing" about this project by representing a majority of the people.

Allison Snow had left the meeting and unable to provide public comment on this item.

Dee Vieira noted an error she found in the December 10 Planning Commission meeting minutes. Ms. Vieira reached out to Fire Captain George Lang; Contra Costa County Fire Protection District who advised it is a non-issue between a two or three ladder engine. Ms. Vieria submitted a copy of the email to the City Clerk.

Diane Selmer, Regency Woods, expressed her concerns with additional traffic. She suggested making the project smaller and livable.

Theresa Jordan expressed her support of this project as an improvement to the neighborhood and Clayton.

Dana Pinaula, Stranahan Circle, expressed her concerns with additional traffic and inadequate parking.

Bob Hoyer supports the comments of Mr. Nunes and the need of rental apartments in Clayton. Mr. Hoyer advised Clayton incorporated to be a City to provide for the all kinds of people.

Douglas Rogers noted the staff report is not impartial, further noting the project would have 80% occupied to anyone 55 and older, and 20% could be rented out to anyone or any age. Mr. Douglas also noted the developer is not following the landscape requirements.

Marie Deplazes expressed her concerns with insufficient parking.

Jim Gamble advised he was part of the Save Clayton group that stopped the Fulcrum Development noting other projects could occur downtown creating more condos. Mr. Gamble is disappointed in the inability to show support of other speakers by clapping.

Kent Ipsen, 6061 Clayton View Lane, expressed his concern with the prior re-zoning of this parcel and parking constraints.

Karen Halleybone does not support this project due to parking constraints. She suggested a smaller project.

Alan Chan expressed support for this project as it provides housing for seniors.

Wendi Laughlin, Stranahan Circle, expressed her support of previous speakers and inquired on possible parking permits.

Dan Hummer expressed his concerns of future development on the other parcels. Mr. Hummer preferred a two-story project.

Steve Velyvis understands the emotion associated with this project. He also noted the developer is proposing to provide five additional parking spaces to handle the demand.

Bill Jordan provided a brief history of this project noting his original plans were not approved by the City due to exceeding the TCSP Zoning. Mr. Jordan requested some flexibility; it was not acceptable as it was over 150 feet long. He knows the neighbors of the property are not in favor of the three story project.

Mayor Pierce closed public comment.

The City Council provided some comments and requested the following questions be researched by staff for additional information.

Councilmembers requested clarification from staff about on- and off-site parking requirements for the proposed project, and asked the applicant to explore additional opportunities to provide parking stalls on and near the site. Councilmembers also asked questions of staff regarding CEQA, the recommended CEQA exemption, and the environmental technical studies prepared for the proposed project; the distinction between concessions and waivers under density bonus law; General Plan and Zoning consistency of the proposed project; and the City's review process and procedures for the proposed project.

The Public Hearing is continued to March 3, 2020 at 7:00 p.m. in Hoyer Hall, 6125 Clayton Road, Clayton, CA.

#### 9. ACTION ITEMS – None.

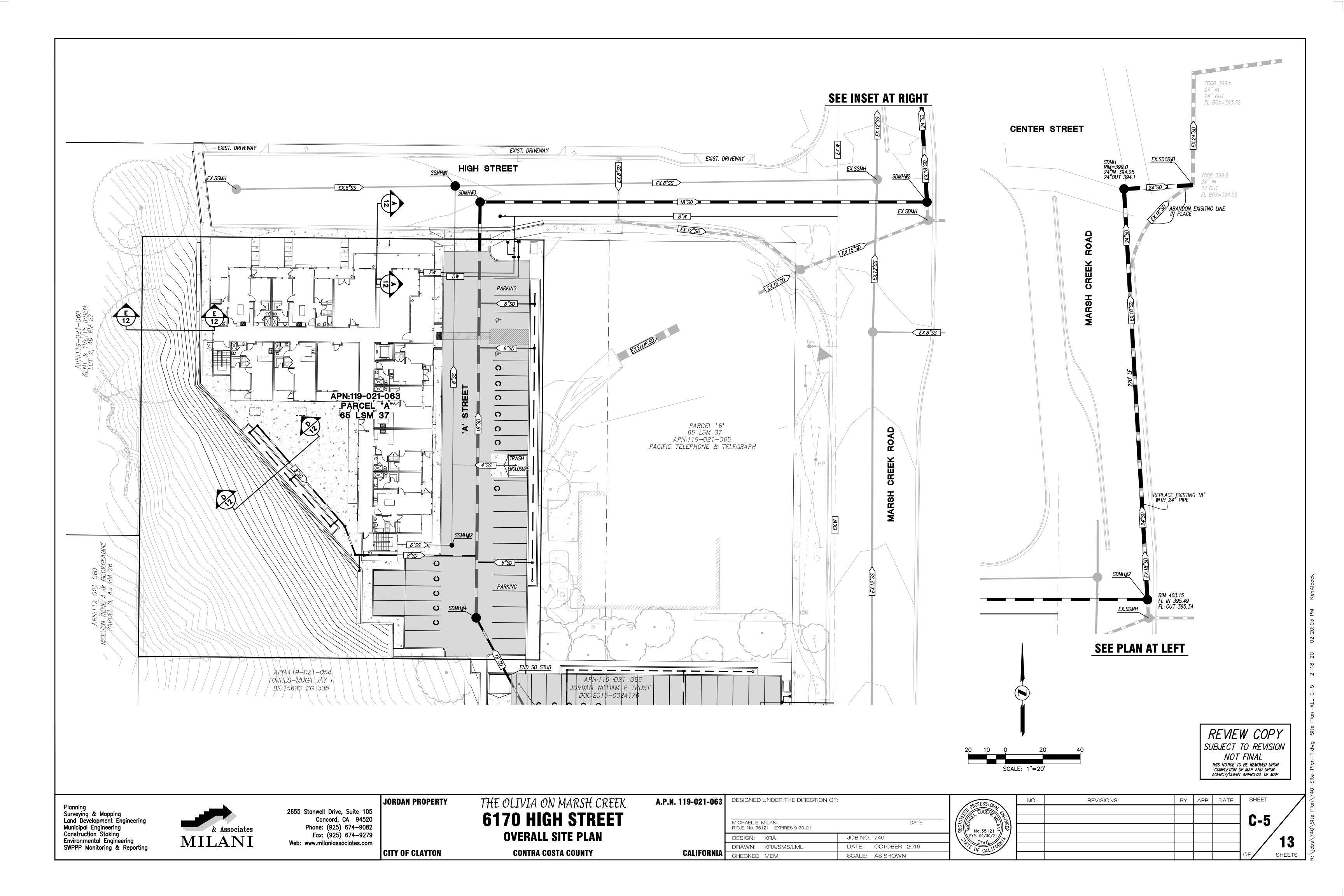
## 10. COUNCIL ITEMS

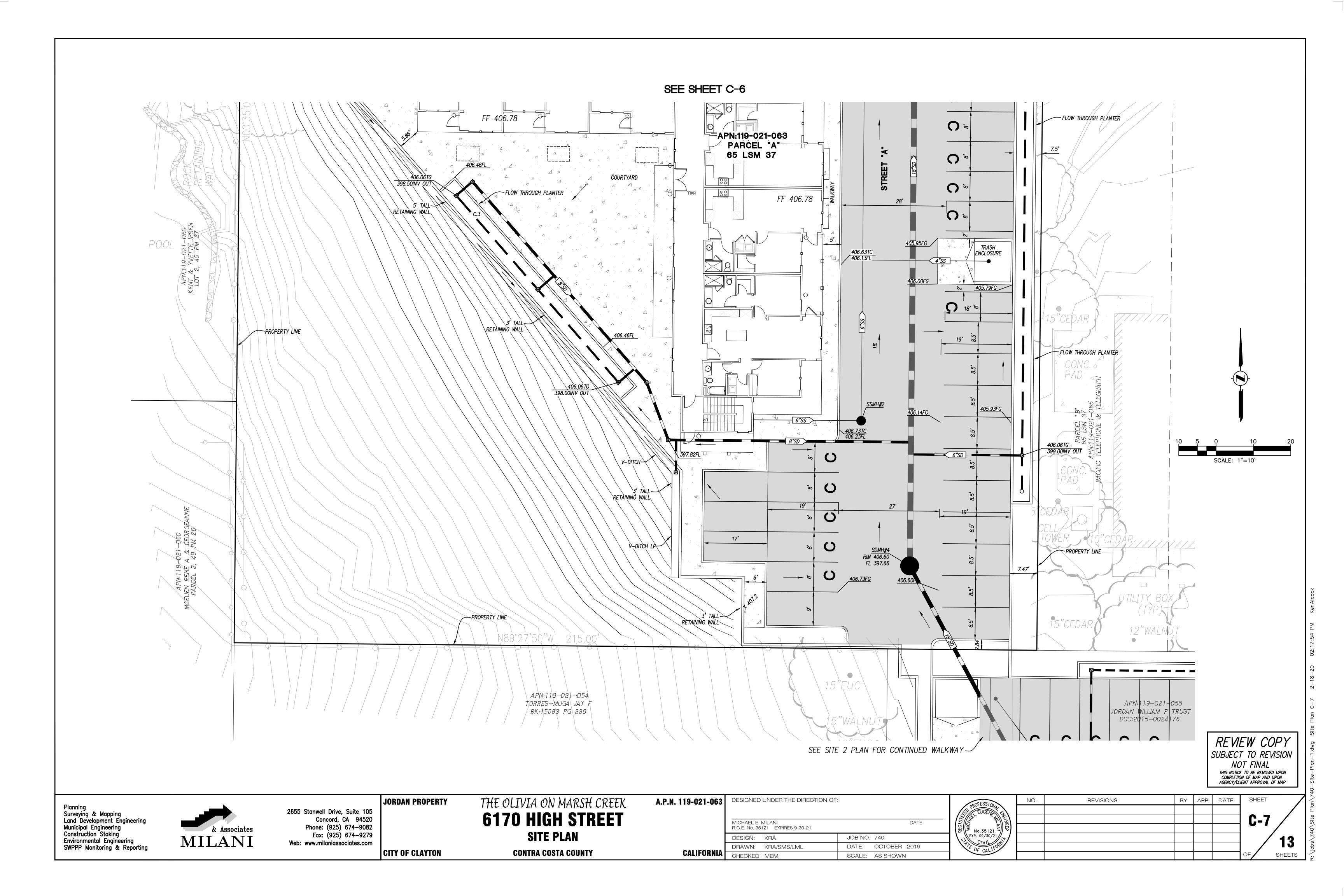
Councilmember Wolfe requested a discussion on sensitive land use exemption in the downtown.

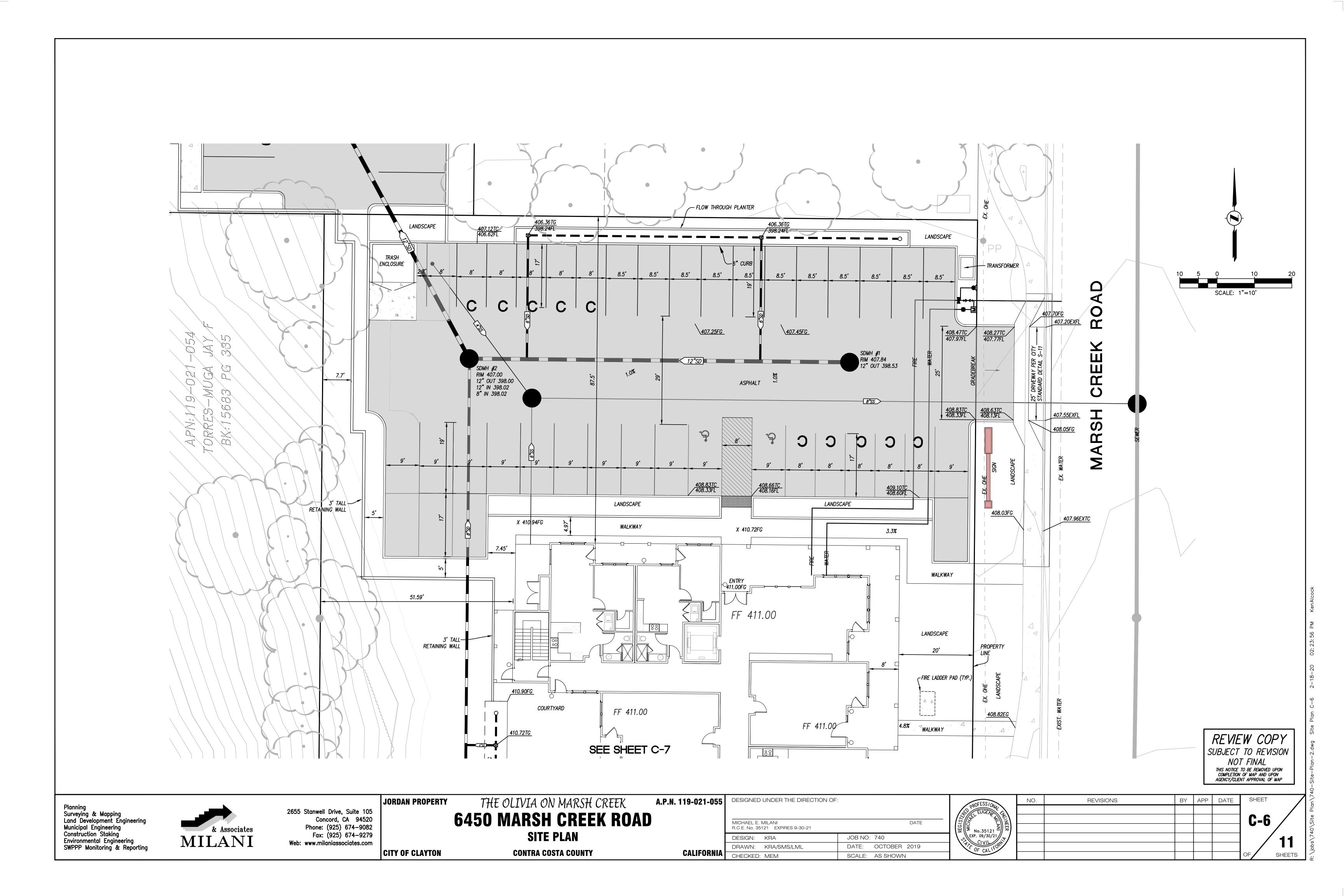
- 11. <u>CLOSED SESSION</u> None.
- **12.** ADJOURNMENT on call by Mayor Pierce, the City Council adjourned its meeting at 10:02 p.m.

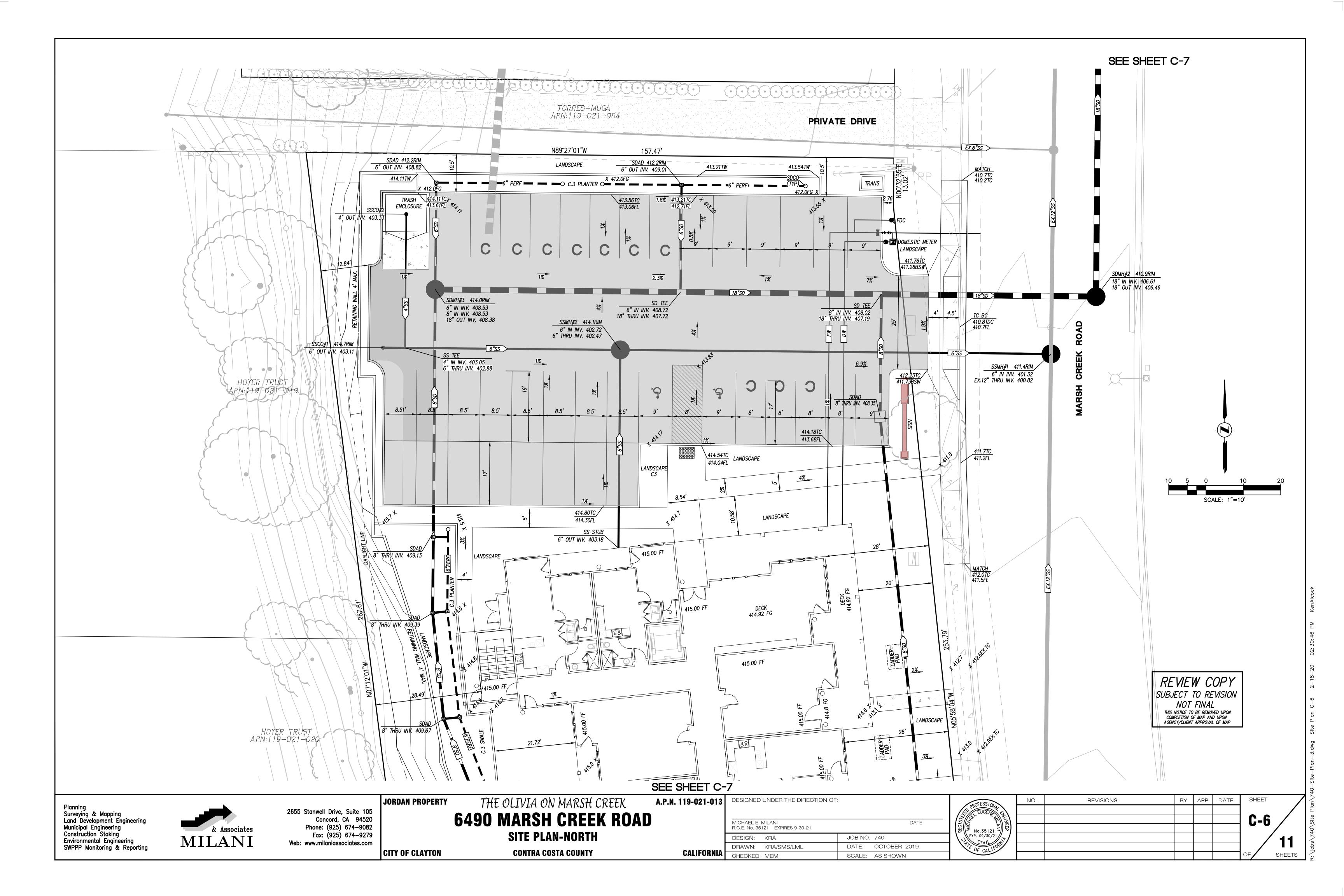
# **Attachment F**

Revised Parking Layout Plans from Applicant, received February 19, 2020









# **Attachment G**

"Biological Constraints Assessment Survey Results" by Olberding Environmental

## **OLBERDING ENVIRONMENTAL, INC.**

Wetland Regulation and Permitting

January 11, 2018

Mr. Bill Jordan P.O. Box 547 Clayton, California 94517

SUBJECT: 6170 High Street/6450 Marsh Creek Road, 6490 Marsh Creek Road - Revised Biological Constraints Assessment Survey Results

Dear Mr. Jordan:

On January 10, 2018, Olberding Environmental, Inc. (Olberding Environmental) conducted a revised Biological Assessment of three parcels near downtown Clayton, California at 6170 High Street and 6450 & 6490 Marsh Creek Road (see Attachment 1, Figure 1). A previous assessment was conducted by Olberding Environmental on December 8, 2015. The purpose of the assessment was to determine the presence or absence of any special status plant and/or wildlife species that may be on or adjacent to the Properties, as well as to assess the habitats on these properties to determine if any are of a sensitive habitat type (such as wetlands). The survey also looked for potential nesting bird sites (including raptors), as well as the potential for areas suitable for bat roosting.

#### **METHODS**

Olberding Environmental biologist, Richard Lescalleet, conducted a daytime visual survey of the Properties which entailed walking transects across all traversable areas of each Property. The survey began at the southernmost Property at 6490 Marsh Creek Road and progressed to the northernmost Property at 6170 High Street.

Although it is early for the recognized nesting bird season (begins February 1<sup>st</sup>), all trees on each Property were surveyed for any active nests. Eves of building, sheds, barns, and other structures were also examined for evidence of active nesting as well as for suitable bat roosting locations. A list of all bird species observed during the survey was made and is included in Attachement 2.

To determine if there were any suitable bat roosting locations, eves of buildings, barns, and other structures, as well as trees with cavities and/or crevices suitable for bats were examined. Openings in exterior walls to structures were noted. Any evidence of potential bat roosting; guano, urine and/or fur staining at openings and under eves was noted if present.

To categorize habitat types, and to determine if any were of a sensitive nature the general landscape topography was assessed, a list of all identifiable plant species was recorded, and general soil condition was noted. If wetland indicator features, such as algal matting, hydric soils, oxidized rhyzospheres, ponding water, distinct bed or bank, or scour lines were present, they were noted.

Prior to the survey, the California Natural Diversity Database (CNDDB) was queried to determine the potential for any special-status plant or wildlife species that may be present on or adjacent to the Properties (Attachment 1, Figure 2 & 3). While walking transects on each parcel, any logs or other debris that may conceal special status amphibian species were lifted to examine their undersides.

Photos of the general landscape, topography, and potential nest and roosting sites were taken throughout all three parcels and are contained in Attachment 3.

#### **RESULTS**

Results of the survey conducted on January 10, 2018 did not find any active bird nests. There was evidence of previous nesting on the Properties; however, it is currently early in the season to expect active nesting and none of the nest sites found were currently active. A dead tree adjacent to the 6490 Marsh Creek Road parcel contained several woodpecker cavities; however, no birds were observed utilizing these cavity nests at the time of the survey. There are numerous trees, both on and adjacent to all three parcels that would provide adequate nesting sites for both passerine birds as well as raptors; however, other than the tree with the cavity nests mentioned above, no bird nests, active or inactive were observed in any other trees.

Open fossorial mammal burrows on each parcel were also examined for any evidence of burrowing owl occupation, including signs of whitewash, decoration, feathers, or beetle husks. Fence posts and other suitable perching sites were also examined for evidence of whitewash. None of the burrows ecountered, nor perch sites, had any of these signs and it was determined than none of the burrows were occupied by burrowing owl.

Evidence of active bat roosts was not found on any of the three parcels surveyed. There was no sign of guano, urine or fur staining on any structures examined. There are adequate places on two of the three parcels (6450 & 6490 Marsh Creek Road) where bats could potentially roost, and nearby Donner Creek is good foraging habitat, however, at the time of this survey it was determined that there are no bats currently roosting on these sites. The 6170 High Street parcel did not have adequate roosting habitat and bats are presumed absent from this parcel.

The habitat assessment found each parcel to be predominately developed land consisting of homes, barns, sheds, and gravel or paved driveways. Portions of each parcel were also made up of non-native annual grassland on the hillsides and horse pastures and paddocks of the Properties. Each parcel also contained several ornamental and decorative trees, most of which were on the south parcel at 6490 Marsh Creek Road. The northernmost parcel at 6170 High Street was predominately a ruderal non-native grassland with the remnants of a demolished structure consisting of its foundation slab and gravel driveway. No other structures were present on this parcel.

The parcel at 6450 Marsh Creek Road had a depressional topographic feature that ran from its southern boundary where there was a dirt-filled culvert, to the northern fenceline that it shared with 6170 High Street. It was determined that this feature exibits the characteristics of a non-jurisdictional depressional swale based on an examination of the wetland indicator status of the dominant plant species recorded within this feature, as well as historical aerial imagery and the general soil types. This topographic feature may have, at one time, exhibited wetland features, but at the time of this survey, there was no distinct bed or bank present, no scour, no hydrologic features, which might include cracked soils or algal matting, nor was there a dominance of wetland plant species present. The feature was dominated by FAC and non-indicator plant species including wild oat (*Avena fatua*), Italian thistle (*Carduus pycnocephalus*), and prickly lettuce (*Lactuca serriola*). This would indicate that this feature does not currently meet the criteria for a jurisdictional wetland.

Finally, while recording the plant and wildlife species on the Properties, it was determined that no rare or special status wildlife species were present on or immediately adjacent to the Properties. The CNDDB inquiry found the potential for three special-status plants within 1-mile of the survey area and two wildlife species with potential to be present in the vicinity of the survey area (see Attachment 1 Figure 2 & 3). None of the parcels contained any suitable habitat for red-legged frog or dusky footed woodrat and they were not found during the survey. Suitable habitat for Federal or State Endangered, Rare, or Threatened Speices does not exist on any of the parcels surveyed.

## CEQA CATAGORICAL EXEMPTION JUSTIFICATION

Section 15332 of the California Environmental Quality Act (CEQA) addresses projects that seek an "In-Fill Development" categorical exemption. Stipulations of this exemption that are addressed here include subsection (a) through (c) as follows:

(a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

All three parcels are zoned in the City of Clayton General Plan as "Multifamily High Density" which is consistent with the surrounding "Town Center", "Single Family High Density", and "Rural Estate" General Planning Zones.

(b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

The combined acreage of the three parcels is 2.92 acres, and as stated above in subsection (a), completely surrounded by urban areas within the city limits of the City of Clayton.

(c) The project site has no value as habitat for endangered, rare or threatened species.

The results section above addresses the potential for Federal and State Endangered, Rare, or Threatened Species. None of the three parcels contained habitat suitable for endangered, rare, or threatened species.

Subsections (d) & (e) of Section 15332 covering traffic, noise, air quality, water quality, and available utilities and public services are not within the purview of this biological constraints assessment.

#### CONCLUSIONS

This Biological Constraints Assessment did not find special-status wildlife species, active nesting birds, burrowing owl, nesting raptors, or roosting bats during the January 10, 2018 survey. There were no wetlands or sensitive habitat found on any of the Properties. No habitats that would support Federally or State Endangered, Rare, or Threatened species were present on any of the parcels surveyed.

This survey took place outside the blooming period for two of the three potential special-status plant species; caper fruited tropidocarpum (March-April) and round-leaved filaree (March-May) so it is recommended that a special-status plant survey take place in the spring. The third special-status plant species, slender silver moss, was not present on any of the Properties.

As this survey took place prior to the generally recognized nesting bird season, it is recommended that if tree removal or demolition is to take place after February 1<sup>st</sup>, an additional nesting bird survey take place within 30-days of any demolition or construction activities. Also, several bat species are migratory and may, later in the season, be found roosting on or adjacent to the Properties. If demolition is to take place after March 1<sup>st</sup>, it is recommended that a formal daylight visual, and evening acoustical survey for roosting bats be conducted within 7-days of

any demolition or construction activities. Both nesting bird and roosting bat surveys can take place concurrently if scheduled within 7-days of the start of demolition work.

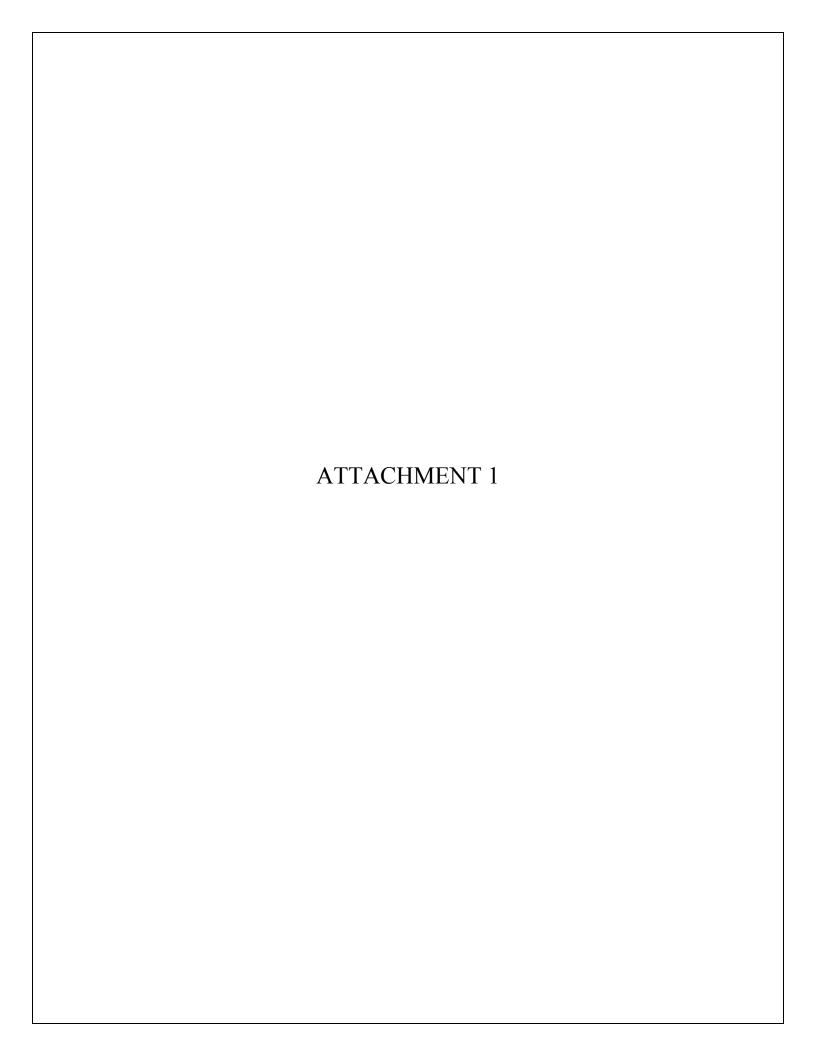
If you have any questions, please feel free to contact me at (925) 866-2111.

Sincerely,

Auff Ollersi

Jeff Olberding

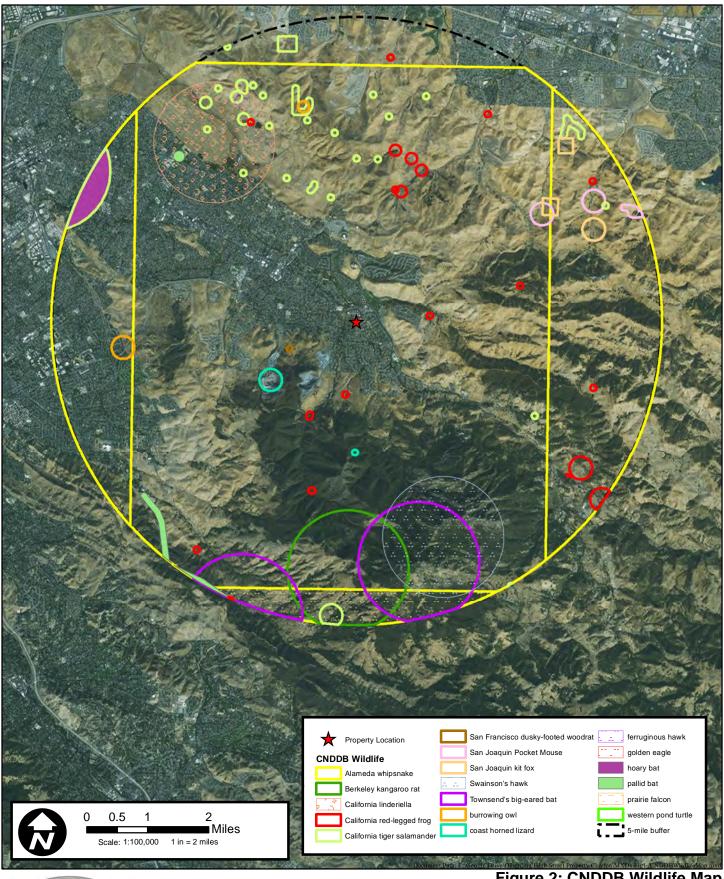
Regulatory Scientist





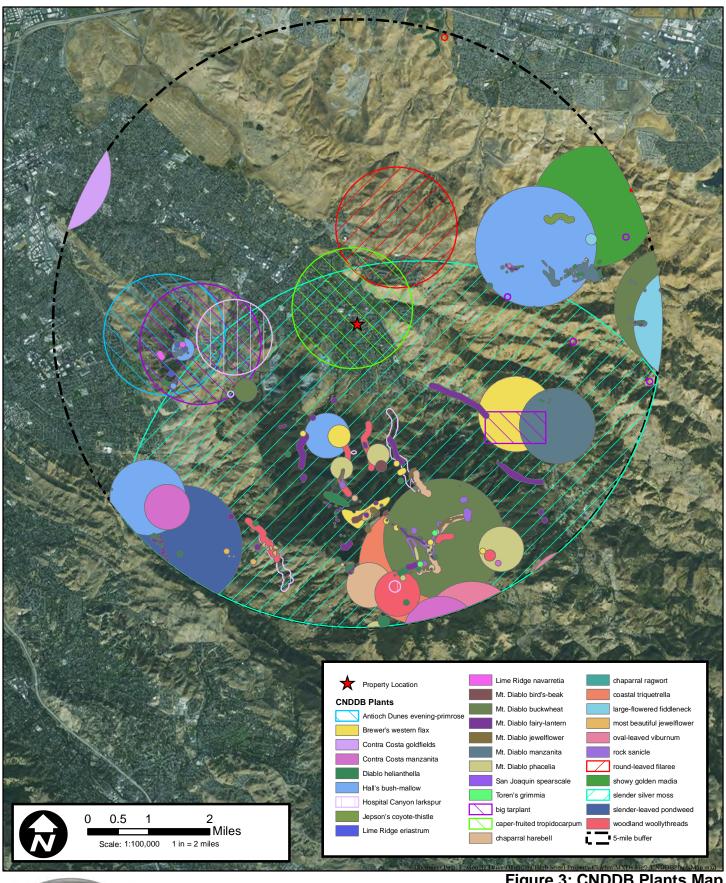


192 Blue Ravine Road, Ste. 165 Folsom, California 95630 Phone: (916) 985-1188 Figure 1: Survey Map Clayton High Street/Marsh Creek Property Contra Costa County



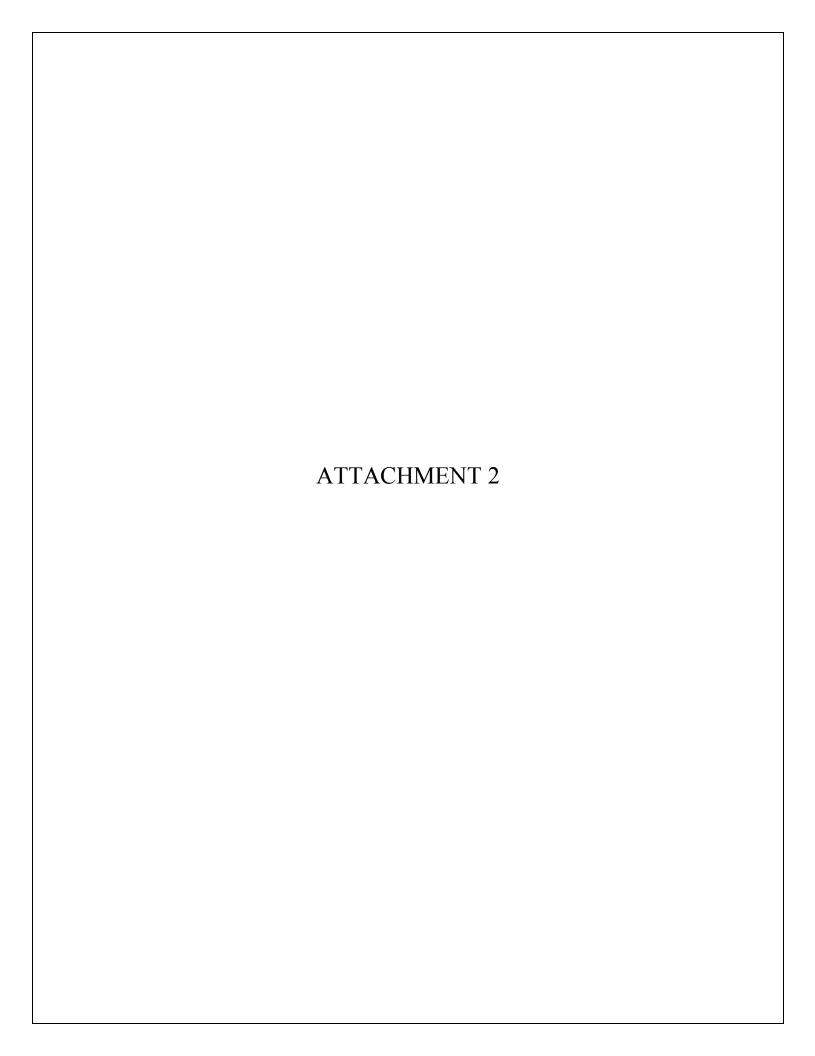


192 Blue Ravine Road, Ste. 165 Folsom, California 95630 Phone: (916) 985-1188 Figure 2: CNDDB Wildlife Map Clayton High Street/Marsh Creek Property Contra Costa County



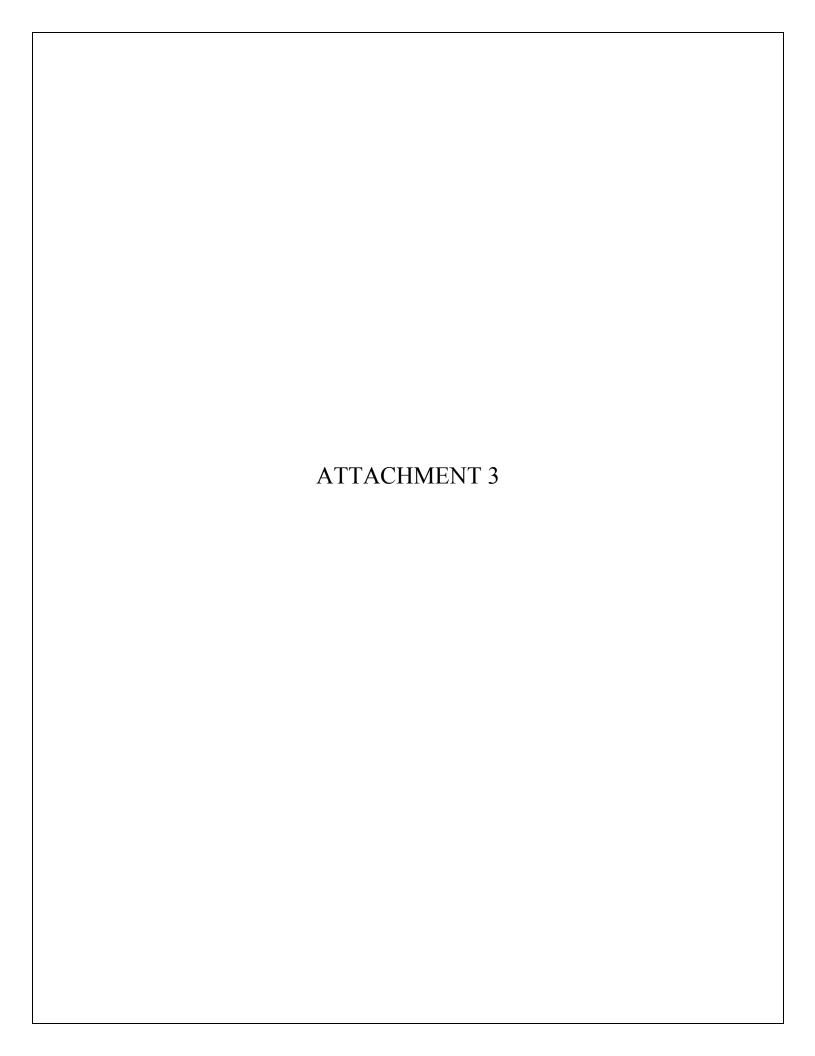


192 Blue Ravine Road, Ste. 165 Folsom, California 95630 Phone: (916) 985-1188 Figure 3: CNDDB Plants Map Clayton High Street/Marsh Creek Property Contra Costa County



**Table 1.** Species Observed at Clayton High Street Properties Site on 1/10/2018

Common Name	Scientific Name	Special-Status					
BIRDS							
Mourning dove	Zenaida macroura	None					
Anna's hummingbird	Calypte anna	None					
Black phoebe	Sayornis nigricans	None					
Oak titmouse	Baeolophus inornatus	None					
American robin	Turdus migratorius	None					
European starling	Sturnus vulgaris	None (Exotic)					
Cedar waxwing	Bombycilla cedrorum	None					
Yellow-rumped warbler	Setophaga coronate	None					
California towhee	Melozone crissalis	None					
Dark-eyed junko	Junco hyemalis	None					
House finch	Haemorhous mexicanus	None					
American goldfinch	Spinus tristis	None					
MAMMALS		77. 7					
Eastern fox squirrel	Sciurus niger	None (Exotic)					
California ground squirrel	Otospermophilus beecheyi	None					
Bottas pocket gopher	Thomomys bottae	None					
PLANTS	Thomomys bouce	None					
	Unite over an	Early growth grasses without seed-heads					
Grass sp.	Unknown sp.	difficult to identify at this stage.					
American wild mint	Mentha arvensis	None					
Stinging nettle	Urtica dioica	None					
Little mallow	Malva parviflora	None (Exotic)					
Common mallow	Malva parvijiora  Malva neglecta	None (Exotic)					
Italian thistle	Carduus pycnocephalus	None (Exotic)					
Milk thistle	Silybum marianum	None (Exotic)					
Coyote brush	Baccharis pilularis	None (Exotic)					
Miner's lettuce	Claytonia perfoliata	None					
Artichoke thistle	Cynara cardunculus	None (Exotic)					
Cutleaf geranium	Geranium dissectum	None (Exotic)					
Field bindweed	Convolvulus arvensis	None (Exotic)					
Bur clover	Medicago polymorpha	None (Exotic)					
Common fiddleneck	Amsinckia intermedia	None (Exotic)					
Wild oat	Avena fatua	None (Exotic)					
Broadleaf filaree	Erodium botrys	None (Exotic)					
Prickly lettuce	Lactuca serriola	None (Exotic)					
Curly dock	Rumex crispus	None (Exotic)					
Himalayan blackberry	Rubus armeniacus	None (Exotic)					
Stinkwort	Dittrichia graveolens	None (Exotic)					
Walnut sp.	Ü	None (Exotic)					
Valley oak	Juglans sp.						
2	Quercus lobate	None					
California sycamore	Platanus recemosa	None (Exotic)					
Blue gum eucalyptus	Eucalyptus globulus						
Coast redwood (ornamental)	Sequoia sempervirons	None					
Italian cypress	Cupressus sempervirons	None (Exotic)					
Pine sp.	Pinus sp.	None (Funding)					
Crape myrtle sp.	Lagerstroemia sp.	None (Exotic)					
Canary Island palm	Phoenix canariensis	None (Exotic)					
Oleander	Nerium oleander	None (Exotic)					





1. Horse pasture at the south side of the 6490 Marsh Creek Road Property. Under the corrugated metal was examined for any potential special-status species. 1/10/2018

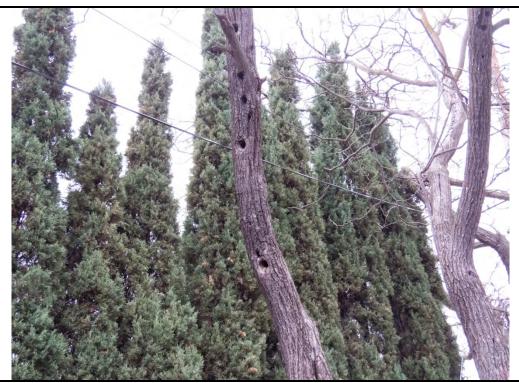


2. Looking down on the horse pasture from the hillside at 6490 Marsh Creek Road. 1/10/2018





3. Ornamental trees at the driveway entrance to the 6490 Marsh Creek Road Property. All trees on each Property were surveyed for active nests. No active nests were observed, but inactive nests were seen. 1/10/2018



4. Currently inactive cavity nests in a dead tree at the entrance driveway of 6490 Marsh Creek Road. 1/10/2018.





5. View facing north in the backyard of the 6450 Marsh Creek Road Property. 1/10/2018



6. View facing south of the 6450 Marsh Creek Road Property. 1/10/2018



# **Attachment H**

"Air Quality & Greenhouse Gas Impact Assessment" by Ambient Air Quality & Noise Consulting



# **TECHNICAL MEMORANDUM**

Date: November 9, 2019

To: Bill Jordan

billjordan@sbcglobal.net

**From:** Kurt Legleiter, Principal

Subject: Air Quality & Greenhouse Gas Impact Assessment for the Proposed Clayton Senior Housing

Project, Clayton, CA

## **PROJECT SUMMARY**

The proposed project includes development of an approximate 81-unit senior housing complex. The project is generally located at the northwestern corner of High Street and Marsh Creek Road, within Clayton, California. The project is located within the Bay Area Air Quality Management District (BAAQMD). The proposed project site plan is depicted in Figure 1 located at the end of this report. Emissions modeling output files are included in Appendix A.

#### THRESHOLDS OF SIGNIFICANCE

Per Appendix G of the California Environmental Quality Act (CEQA) Guidelines and BAAQMD recommendations, air quality impacts are considered significant if implementation of the proposed project would:

- 1) Conflict with or obstruct implementation of the applicable air quality plan.
- 2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation.
- 3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- 4) Expose sensitive receptors to substantial pollutant concentrations.
- 5) Create objectionable odors affecting a substantial number of people.

According to the State CEQA Guidelines, the significance criteria established by the applicable air quality management or air pollution control district may be used to make significance determinations for potential impacts on environmental resources. The BAAQMD is responsible for ensuring that state and federal ambient air quality standards are not violated within the San Francisco Bay Area Air Basin. Analysis requirements for construction- and operation-related pollutant emissions are contained in the BAAQMD's CEQA Guidelines, which initially were adopted by the BAAQMD's Board of Directors on June 2, 2010. These thresholds are summarized in Table 1. On March 5, 2012 the Alameda County Superior Court issued a judgment finding that the BAAQMD had failed to comply with CEQA when it adopted the 2010 thresholds. The court did not determine whether the thresholds were valid on the merits, but found that the adoption of the thresholds was a project under CEQA. In view of these findings, the BAAQMD is no longer recommending that the 2010 significance thresholds be used as a generally applicable



measure of a project's significant air quality impacts. However, the 2010 significance thresholds are based on substantial evidence, in accordance with Appendix D of the CEQA Air Quality Guidelines. The CEQA Air Quality Guidelines were most recently updated in 2017. Though not recommended by the BAAQMD, lead agencies may determine these thresholds of significance to be appropriate, based on the substantial evidence provided, and applied for evaluation of impacts.

**TABLE 1. SUMMARY OF BAAQMD SIGNIFICANCE THRESHOLDS** 

POLLUTANT	CONSTRUCTION	OPERATION
Criteria Air Pollutants &		
Precursors		
ROG:	54 lbs/day	54 lbs/day or 10 tons/year
NOX:	54 lbs/day	54 lbs/day or 10 tons/year
CO:		Violation of CAAQS
PM10 (exhaust):	82 lbs/day	82 lbs/day or 15 tons/year
PM2.5 (exhaust):	54 lbs/day	54 lbs/day or 10 tons/year
PM10/PM2.5 (fugitive dust):	<b>Best Management Practices</b>	
Risk and Hazards for New	Same as Operational Threshold	Compliance with Qualified Community
Sources and Receptors		Risk-Reduction Plan; OR, Increased
		cancer risk of >10.0 in a million;
		Increased non-cancer risk of > 1.0
		Hazard Index (Chronic or Acute)
Odors	None	Exposure of receptors to odor sources
		with 5 confirmed complaints per year
		average over three years
GHGs (Non-Stationary Source	<u></u>	Compliance with Qualified GHG
Projects)		Reduction Strategy OR
		1,100 MTCO2e/yr OR 4.6
		MTCO2e/SP/yr
BAAQMD 2017		

### **EMISSIONS ASSESSMENT**

#### Methodology

Short-term construction and long-term operational emissions were quantified using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. Construction emissions were quantified based on an estimated 6,535 square feet of building floor area to be demolished, approximately 70,000 square feet of building area to be constructed, and a total of 86 parking spaces. Based on estimates provided by the project applicant, the removal of trees, brush, concrete, gravel, fencing, and other miscellaneous on-site materials (excluding structures to be demolished) would require the additional use of two chainsaws, one chipper, and 14 on-road haul trucks. The removal of trees, brush, concrete, gravel, fencing, and other miscellaneous materials was assumed to occur concurrent with on-site structural demolition activities. Architectural coatings were assumed to occur over an approximate 120-day period following an initial building construction period of 100 days, based on information provided by the project applicant. All other construction assumptions were based on default parameters contained



in the model. Operational emissions were quantified based on a total of 81 residential units and a daily tripgeneration rate of 3.44 vehicle trips/dwelling unit derived from the traffic analysis prepared for this project.

GHG emissions were also quantified using the CalEEMod computer program. Construction-generated GHG emissions were amortized over a minimum project life of 25 years. Amortized construction-generated GHG emissions were included with operational emissions and compared to BAAQMD-recommended mass-emissions significance threshold of 1,100 MTCO<sub>2</sub>e/year. Emissions not exceeding this threshold would not be considered to have a significant impact on the environment or conflict with GHG-reduction planning efforts.

#### **Long-term Emissions of Criteria Air Pollutants & Precursors**

Estimated annual and maximum daily operational emissions for the proposed project are summarized in Tables 2 and 3, respectively. As depicted, annual and daily operational emissions would not exceed BAAQMD-recommended significance thresholds. Area sources include emissions associated with the use of architectural coatings, consumer products, landscape maintenance activities, and hearth devices. In the event that hearth devices are not installed, total project-generated emissions of ROG, CO, and PM would be further reduced. Because operational emissions would not exceed BAAQMD-recommended significance thresholds, long-term air quality impacts to regional air quality would be considered less than significant.

TABLE 2. ANNUAL OPERATIONAL EMISSIONS OF CRITERIA AIR POLLUTANTS

	EMISSIONS (TONS/YEAR) <sup>1</sup>										
SOURCE	ROG N	NOx	со	SO <sub>2</sub>	PM <sub>10</sub>			PM <sub>2.5</sub>			
		NOx			FUG.	EXH.	TOTAL	FUG.	EXH.	TOTAL	
Area <sup>2</sup>	0.53	0.01	0.86	0.0	0.0	0.04	0.04	0.0	0.04	0.04	
Energy	0.0	0.03	0.01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Mobile	0.08	0.37	0.92	0.0	0.24	0.0	0.24	0.07	0.0	0.07	
Total with Hearths:	0.61	0.41	1.79	0.0	0.24	0.04	0.28	0.07	0.04	0.11	
Total without Hearths <sup>3</sup> :	0.42	0.41	1.79	0.0	0.24	0.0	0.24	0.07	0.0	0.07	
Thresholds:	10	10	-	-	-		15	-	1	10	
Exceeds Thresholds?	No	No					No			No	

- 1. Totals may not sum due to rounding. Refer to Appendix A for emissions modeling assumptions and results.
- 2. Includes use of architectural coatings, consumer products, hearth devices, and landscape maintenance activities.
- 3. Excludes the installation of wood-burning and natural gas hearth devices.

#### **Short-term Emissions of Criteria Air Pollutants & Precursors**

Estimated daily construction-generated emissions for the proposed project are summarized in Table 4. Based on the modeling conducted, maximum daily emissions of ROG would occur during the site construction phase, which would assume that building construction, asphalt paving and architectural coating could potentially occur on the same day. Maximum daily emissions of  $NO_X$ ,  $PM_{10}$  and  $PM_{2.5}$  would occur during the site preparation phase. As indicated, construction-generated emissions would not exceed BAAQMD-recommended significance thresholds. This impact would be considered less than significant.



TABLE 3. MAXIMUM DAILY OPERATIONAL EMISSIONS OF CRITERIA AIR POLLUTANTS

	EMISSIONS (LBS/DAY) <sup>1</sup>										
SOURCE	DOC	NOx	со	SO <sub>2</sub>	PM <sub>10</sub>			PM <sub>2.5</sub>			
	ROG				FUG.	EXH.	TOTAL	FUG.	EXH.	TOTAL	
Area <sup>2</sup>	35.30	0.81	50.72	0.09	0.0	6.29	6.29	0.0	6.29	6.29	
Energy	0.02	0.18	0.08	0.0	0.0	0.01	0.01	0.0	0.01	0.01	
Mobile	0.53	2.05	5.36	0.02	1.37	0.02	1.39	0.37	0.02	0.38	
Total with Hearths:	35.85	2.93	56.16	0.11	1.37	6.32	7.68	0.37	6.32	6.68	
Total without Hearths <sup>3</sup> :	2.54	2.19	12.15	0.02	1.37	0.07	1.43	0.37	0.07	0.43	
Thresholds:	54	54					82			54	
Exceeds Thresholds?	No	No					No			No	

<sup>1.</sup> Totals may not sum due to rounding. Refer to Appendix A for emissions modeling assumptions and results.

TABLE 4. MAXIMUM DAILY CONSTRUCTION EMISSIONS OF CRITERIA AIR POLLUTANTS

CONCTRUCTION	EMISSIONS (LBS/DAY) <sup>1</sup>									
CONSTRUCTION PHASE	ROG	NOx	со	SO <sub>2</sub>	PM <sub>10</sub>			PM <sub>2.5</sub>		
					FUG.	EXH.	TOTAL	FUG.	EXH.	TOTAL
Demolition	4.10	42.16	25.89	0.04	0.48	2.11	2.59	0.09	2.01	2.10
Site Preparation	4.64	48.26	23.12	0.04	7.20	2.58	9.77	3.91	2.37	6.28
Grading	2.84	30.72	17.11	0.03	2.68	1.55	4.23	1.34	1.43	2.77
Building	3.06	25.38	20.42	0.03	0.65	1.52	2.17	0.17	1.42	1.59
Paving	1.52	12.82	12.94	0.02	0.16	0.72	0.89	0.04	0.66	0.71
Architectural Coatings	8.62	1.88	2.28	0.0	0.12	0.13	0.25	0.03	0.13	0.16
Daily Maximum <sup>2</sup> :	13.20	48.26	25.89	0.04	7.20	2.58	9.77	3.91	2.37	6.28
Thresholds:	54	54	1		1		82	1	1	54
Exceeds Thresholds?	No	No					No			No

<sup>1.</sup> Totals may not sum due to rounding. Refer to Appendix A for emissions modeling assumptions and results.

#### **Exposure to Localized Pollutant Concentrations**

Naturally-Occurring Asbestos

The proposed project site is not located in an area anticipated to contain naturally-occurring asbestos (NOA).<sup>1</sup> However, in the event that NOA were to be identified or discovered at the project site, the project would be required

AQ & GHG Impact Assessment
Proposed Clayton Senior Housing Project

<sup>2.</sup> Includes use of architectural coatings, consumer products, hearth devices, and landscape maintenance activities.

<sup>3.</sup> Excludes the installation of wood-burning and natural gas hearth devices.

<sup>2.</sup> Based on highest daily emissions per construction phase. Assumes building construction, architectural coating application, and paving could occur simultaneously on the same day.

<sup>&</sup>lt;sup>1</sup> California Department of Conservation. 2000. A General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos, Open-File Report 2000-19. Website url: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/ofr\_2000-019.pdf.



to comply with applicable provisions of the California Air Resources Board's (ARB) Airborne Toxic Control Measure (ACTM) for NOA. BAAQMD enforces ARB's ATCM which regulates NOA emissions from grading, quarrying, and surface mining operations at sites which contain ultramafic rock. The provisions that cover these operations are found specifically in the California Code of Regulations, Section 93105. The ATCM requires regulated operations engaged in road construction and maintenance activities, construction and grading operations, and quarrying and surface mining operations in areas where NOA is likely to be found, to employ the best available dust mitigation measures to reduce and control dust emissions. With compliance with existing regulatory requirements pertaining to NOA, this impact would be considered less than significant.

#### Asbestos-Containing Materials

The proposed project would require the demolition of existing structures, which may also result in increased emissions of fugitive dust and potential disturbance of asbestos-containing materials (ACM). Demolition of existing buildings and structures would be subject to BAAQMD Regulation 11, Rule 2 (Asbestos Demolition, Renovation, and Manufacturing). BAAQMD Regulation 11, Rule 2 is intended to limit asbestos emissions from demolition or renovation of structures and the associated disturbance of ACM waste generated or handled during these activities. The rule addresses the national emissions standards for asbestos along with some additional requirements. The rule requires the Lead Agency and its contractors to notify BAAQMD of any regulated renovation or demolition activity. This notification includes a description of structures and methods utilized to determine whether ACMs are potentially present. All ACM found on the site must be removed prior to demolition or renovation activity in accordance with BAAQMD Regulation 11, Rule 2, including specific requirements for surveying, notification, removal, and disposal of material containing asbestos. Therefore, projects that comply with Regulation 11, Rule 2 would ensure that asbestos-containing materials would be disposed of appropriately and safely. By complying with BAAQMD Regulation 11, Rule 2, thereby minimizing the release of airborne asbestos emissions, demolition activity would not result in a significant impact to air quality.

#### Stationary & Mobile-Source TACs

Based on a review of the BAAQMD's permitted facilities, no currently permitted stationary sources of emissions that would exceed the BAAQMD's recommended risk thresholds have been identified in the project area. In addition, the project site is not located within 500 feet of a major freeway. Exposure to stationary and mobile-source TACs would be a less-than-significant impact.

#### Localized Carbon Monoxide

According to the BAAQMD's screening criteria for assessment of potential exposure to localized mobile-source carbon monoxide (CO) concentrations, a proposed project would be considered to have a potentially significant impact if the project would generate increased vehicle traffic of more than a minimum of 44,000 vehicles per hour (vph) at affected intersections, or 24,000 vph where vertical and/or horizontal mixing would be inhibited (e.g., tunnels, parking garages).

Intersections primarily affected by the proposed project include the intersections of Clayton Road/Marsh Creek Road and Clayton Road/Main Street. These intersections are not located in areas where vertical and/or horizontal mixing would be inhibited. On a peak-hour basis, the proposed project would generate 16 AM and 21 PM peak-hour trips.<sup>2</sup> Based on the traffic analysis prepared for the *Clayton Community Church Project* (2011), maximum AM and PM peak-

\_

<sup>&</sup>lt;sup>2</sup> Kimley-Horn. May 8, 2017. Clayton Senior House Trip Generation Study Final Letter.



612 12<sup>th</sup> Street, Suite 201 Paso Robles, CA 93446 805.226.2727 www.Ambient.Consulting

hour traffic volumes under future cumulative 2035 conditions at the Clayton Road/Marsh Creek Road intersection would be 2,018 and 1,985 vehicles, respectively. Under these same conditions, maximum AM and PM peak-hour traffic volumes at the Clayton Road/Main Street intersection would be 798 and 824 vehicles, respectively. With the inclusion of project-generated traffic, maximum peak-hour traffic volumes under cumulative 2035 conditions would be 2,034 and 845 vehicles at the Clayton Road/Marsh Creek Road and Clayton Road/Main Street intersections, respectively.<sup>3</sup> Near-term intersection volumes would be less.

Maximum peak-hour traffic volumes at the Clayton Road/Main Street and Clayton Road/Main Street intersections would not exceed the BAAQMD's screening criteria of 44,000 vph. It is also important to note that localized CO concentrations at signalized intersections do not typically begin to exceed ambient air quality standards until intersection operations equal or exceed a projected level of service (LOS) of E.<sup>4</sup> Under future cumulative 2035 conditions, the intersections of Clayton Road/Marsh Creek Road and Clayton Road/Main Street are projected to operate at LOS B, or better. For these reasons, the proposed project would not result in a significant contribute to localized mobile-source CO concentrations that would adversely impact nearby receptors.

#### **Exposure to Odorous Emissions**

The BAAQMD's 2010 CEQA Guidelines include screening distances for major stationary sources, such as wastewater treatment plants, sanitary landfills, composting facilities, and rendering plants, among others. No major stationary sources of odors have been identified within the screening distances identified. Exposure to odorous emissions would be considered less than significant.

#### **Consistency with Air Quality Plans**

Proposed projects that have a less than significant air quality impact would also be considered to have a less-than-significant impact with regard to consistency with regional air quality planning efforts. In addition, the proposed project is consistent with current zoning designations and would not result in a substantial change in projected regional emissions inventory. As a result, the proposed project would not conflict with applicable air quality plans.

#### **GHG Emissions**

The proposed project includes development of an approximate 81-unit senior housing complex. Construction and operational GHG emissions are summarized in Table 5. As depicted, construction of the proposed project would generate a total of approximately 442.7 MTCO<sub>2</sub>e. Assuming a minimum project life of 25 years, amortized construction emissions would total approximately 17.7 MTCO<sub>2</sub>e/year. Operational emissions would total approximately 447.66 MTCO<sub>2</sub>e/year. Operational emissions, when combined with amortized construction emissions, would total 465.37 MTCO<sub>2</sub>e/year. With the exclusion of hearth devices, operational emissions, when combined with amortized construction emissions, would total 459.94 MTCO<sub>2</sub>e/year. Project-generated GHG emissions would not exceed the BAAQMD-recommended significance threshold of 1,100 MTCO<sub>2</sub>e/year. This impact would be considered less than significant. Depending on the size of the system installed, the installation of solar photovoltaic systems would also help to minimize GHG emissions.

-

<sup>&</sup>lt;sup>3</sup> City of Clayton. 2011. Clayton Community Church Project.

<sup>&</sup>lt;sup>4</sup> California Department of Transportation. 1997. Transportation Project-Level Carbon Monoxide Protocol.



612 12<sup>th</sup> Street, Suite 201 Paso Robles, CA 93446 805.226.2727 www.Ambient.Consulting

#### **TABLE 5. PROJECT-GENERATED GHG EMISSIONS**

TABLE 5.1 NOTECT-GENERATED GITG ENVISSIONS							
SOURCE	MTCO <sub>2</sub> e/YEAR						
Construction							
Total Construction Emissions	442.65						
Amortized Construction Emissions (25-Year Project Life)	17.71						
Operational							
Area <sup>1</sup>	6.44						
Energy	138.16						
Mobile	265.40						
Waste	18.74						
Water	18.92						
Total Operational Emissions	447.66						
Total Operational with Hearths & Amortized Construction Emissions:	465.37						
Total Operational without Hearths & with Amortized Construction Emissions <sup>2</sup> :	459.94						
Annual Significance Threshold:	1,100						
Exceeds Threshold?:	No						

<sup>1.</sup> Includes use of architectural coatings, consumer products, hearth devices, and landscape maintenance activities.

<sup>2.</sup> Excludes the installation of wood-burning and natural gas hearth devices, which would reduce GHG emissions by approximately 5.4 MTCO<sub>2</sub>e/year.

#### **FIGURE 1. PRELIMINARY SITE PLAN**



# APPENDIX A EMISSIONS MODELING

#### CONSTRUCTION EMISSIONS SUMMARY

	MAXIMUM DAILY EMISSIONS									
						PM10			PM2.5	
SCENARIO/CONST PHASE	ROG	NOX	co	SO2	FUG	EXH	TOT	FUG	EXH	TOT
DEMO										
ONSITE	4.02	41.38	25.26	0.04	0.32	2.10	2.42	0.05	2.00	2.05
OFFSITE	0.08	0.78	0.63	0.00	0.16	0.01	0.17	0.04	0.01	0.05
TOTAL	4.10	42.16	25.89	0.04	0.48	2.11	2.59	0.09	2.01	2.10
SITE PREP										
ONSITE	4.56	48.20	22.48	0.04	7.05	2.58	9.62	3.87	2.37	6.24
OFFSITE	0.08	0.06	0.64	0.00	0.15	0.00	0.15	0.04	0.00	0.04
TOTAL	4.64	48.26	23.12	0.04	7.20	2.58	9.77	3.91	2.37	6.28
GRADING										
ONSITE	2.77	30.67	16.58	0.03	2.56	1.55	4.11	1.31	1.43	2.74
OFFSITE	0.07	0.05	0.53	0.00	0.12	0.00	0.12	0.03	0.00	0.03
TOTAL	2.84	30.72	17.11	0.03	2.68	1.55	4.23	1.34	1.43	2.77
BUILDING										
ONSITE	2.68	23.39	17.58	0.03	0.00	1.50	1.50	0.00	1.40	1.40
OFFSITE	0.38	1.99	2.84	0.00	0.65	0.02	0.67	0.17	0.02	0.19
TOTAL	3.06	25.38	20.42	0.03	0.65	1.52	2.17	0.17	1.42	1.59
PAVING										
ONSITE	1.40	12.76	12.31	0.02	0.00	0.72	0.72	0.00	0.66	0.66
OFFSITE	0.08	0.06	0.63	0.00	0.16	0.00	0.17	0.04	0.00	0.05
TOTAL	1.48	12.82	12.94	0.02	0.16	0.72	0.89	0.04	0.66	0.71
ARCH COATING										
ONSITE-ARCH COATING (STANDARD PAINTS)	8.56	1.84	1.84	0.00	0.00	0.13	0.13	0.00	0.13	0.13
OFFSITE	0.06	0.04	0.44	0.00	0.12	0.00	0.12	0.03	0.00	0.03
TOTAL	8.62	1.88	2.28	0.01	0.12	0.13	0.25	0.03	0.13	0.16
MAXIMUM DAILY EMISSIONS										
DEMO	4.10	42.16	25.89	0.04	0.48	2.11	2.59	0.09	2.01	2.10
SITE PREP	4.64	48.26	23.12	0.04	7.20	2.58	9.77	3.91	2.37	6.28
GRADING	2.84	30.72	17.11	0.03	2.68	1.55	4.23	1.34	1.43	2.77
BUILDING, PAVING & ARCH COATING (STANDARD PAINTS)	13.16	40.08	35.64	0.06	0.93	2.37	3.31	0.24	2.21	2.46

 THRESHOLDS
 54
 54
 82
 54

 EXCEEDS THRESHOLD (BOLD FONT)?
 NO
 NO
 NO
 NO

#### OPERATIONAL EMISSIONS SUMMARY

				A	NUAL EMIS	SSIONS (TO	NS)				
						PM10			PM2.5		
SOURCE	ROG	NOX	co	SO2	FUG	EXH	TOT	FUG	EXH	TOT	MT CO2e
AREA	0.53	0.01	0.86	0.00	0.00	0.04	0.04	0.00	0.04	0.04	6.44
ENERGY	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137.64
MOBILE	0.08	0.37	0.92	0.00	0.24	0.00	0.24	0.07	0.00	0.07	265.40
WASTE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.74
WATER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.92
TOTAL	0.61	0.41	1.79	0.00	0.24	0.04	0.28	0.07	0.04	0.11	447.14
THRESHOLDS	10	10			•	•	15		•	10	
EXCEEDS THRESHOLD?	OLD? NO NO NO NO										
	AMORTIZED CONSTRUCTION:								16.90		
							TOTAL W	ITH AMOR	TIZED CONS	TRUCTION:	464.04
TOTAL WITH AMORTIZED CONSTRUCTION AND EXCLUDING HEARTH:								458.64			

TRHESHOLD 1,100

EXCEEDS THRESHOLD? NO

	SUMMER DAILY EMISSIONS (LBS)									
						PM10			PM2.5	
SOURCE	ROG	NOX	co	SO2	FUG	EXH	TOT	FUG	EXH	TOT
AREA	35.30	0.81	50.72	0.09	0.00	6.29	6.29	0.00	6.29	6.29
ENERGY	0.02	0.18	0.08	0.00	0.00	0.01	0.01	0.00	0.01	0.01
MOBILE	0.53	1.94	5.36	0.01	1.37	0.02	1.38	0.37	0.02	0.38
TOTAL	35.85	2.93	56.16	0.10	1.37	6.32	7.68	0.37	6.32	6.68
THRESHOLDS	54	54					82			54
EXCEEDS THRESHOLD?	NO	NO					NO			NO

		WINTER DAILY EMISSIONS (LBS)									
					PM10				PM10 PM2.5		
SOURCE	ROG	NOX	co	SO2	FUG	EXH	TOT	FUG	EXH	TOT	
AREA	35.30	0.81	50.72	0.09	0.00	6.29	6.29	0.00	6.29	6.29	
ENERGY	0.02	0.18	0.08	0.00	0.00	0.01	0.01	0.00	0.01	0.01	
MOBILE	0.44	2.05	5.35	0.02	1.37	0.02	1.38	0.37	0.02	0.38	
TOTAL	35.76	3.04	56.15	0.11	1.37	6.32	7.68	0.37	6.32	6.68	

82 54 THRESHOLDS 54 EXCEEDS THRESHOLD? NO NO NO

#### CO SCREENING ASSESSMENT

							EXCEEDS
			PK-HR	PROJECT PK-HR TRIP-	TOTAL PK-HR	SCREENING	SCREENING
INTERSECTION	EVALUATED SCENARIO	LOS	VOLUME	GENERATION	VOLUME	THRESHOLD	THRESHOLD?
Clayton Rd/Marsh Creek Rd.	Existing AM Pk-Hr	Α	2012	16	2028	44000	No
	Existing PM Pk-Hr	Α	1972	21	1993	44000	No
Clayton Rd/Marsh Creek Rd.	Cumulative 2035 AM Pk-Hr	Α	2018	16	2034	44000	No
	Cumulative 2035 PM Pk-Hr	Α	1985	21	2006	44000	No
Main St/Marsh Creek Rd.	Existing AM Pk-Hr	В	793	16	809	44000	No
	Existing PM Pk-Hr	В	811	21	832	44000	No
Main St/Marsh Creek Rd.	Cumulative 2035 AM Pk-Hr	В	798	16	814	44000	No
	Cumulative 2035 PM Pk-Hr	В	824	21	845	44000	No

<sup>\*</sup>Limited mixing is not present.

Source: Clayton Community Church Project Environmental Impact Report (May 2011).

#### **CONSTRUCTION EMISSIONS SUMMARY**

	MAXIMUM DAILY EMISSIONS									
						PM10			PM2.5	
SCENARIO/CONST PHASE	ROG	NOX	со	SO2	FUG	EXH	TOT	FUG	EXH	TOT
DEMO										
ONSITE	4.02	41.38	25.26	0.04	0.32	2.10	2.42	0.05	2.00	2.05
OFFSITE	0.08	0.78	0.63	0.00	0.16	0.01	0.17	0.04	0.01	0.05
TOTAL	4.10	42.16	25.89	0.04	0.48	2.11	2.59	0.09	2.01	2.10
SITE PREP										
ONSITE	4.56	48.20	22.48	0.04	7.05	2.58	9.62	3.87	2.37	6.24
OFFSITE	0.08	0.06	0.64	0.00	0.15	0.00	0.15	0.04	0.00	0.04
TOTAL	4.64	48.26	23.12	0.04	7.20	2.58	9.77	3.91	2.37	6.28
GRADING										
ONSITE	2.77	30.67	16.58	0.03	2.56	1.55	4.11	1.31	1.43	2.74
OFFSITE	0.07	0.05	0.53	0.00	0.12	0.00	0.12	0.03	0.00	0.03
TOTAL	2.84	30.72	17.11	0.03	2.68	1.55	4.23	1.34	1.43	2.77
BUILDING										
ONSITE	2.68	23.39	17.58	0.03	0.00	1.50	1.50	0.00	1.40	1.40
OFFSITE	0.38	1.99	2.84	0.00	0.65	0.02	0.67	0.17	0.02	0.19
TOTAL	3.06	25.38	20.42	0.03	0.65	1.52	2.17	0.17	1.42	1.59
PAVING										
ONSITE	1.44	12.76	12.31	0.02	0.00	0.72	0.72	0.00	0.66	0.66
OFFSITE	0.08	0.06	0.63	0.00	0.16	0.00	0.17	0.04	0.00	0.05
TOTAL	1.52	12.82	12.94	0.02	0.16	0.72	0.89	0.04	0.66	0.71
ARCH COATING										
ONSITE-ARCH COATING (STANDARD PAINTS)	8.56	1.84	1.84	0.00	0.00	0.13	0.13	0.00	0.13	0.13
OFFSITE	0.06	0.04	0.44	0.00	0.12	0.00	0.12	0.03	0.00	0.03
TOTAL	8.62	1.88	2.28	0.01	0.12	0.13	0.25	0.03	0.13	0.16
MAXIMUM DAILY EMISSIONS		•	•	•	•		•	•		
DEMO	4.10	42.16	25.89	0.04	0.48	2.11	2.59	0.09	2.01	2.10
SITE PREP	4.64	48.26	23.12	0.04	7.20	2.58	9.77	3.91	2.37	6.28
GRADING	2.84	30.72	17.11	0.03	2.68	1.55	4.23	1.34	1.43	2.77
BUILDING, PAVING & ARCH COATING (STANDARD PAINTS)	13.20	40.08	35.64	0.06	0.93	2.37	3.31	0.24	2.21	2.46
THRESHOLDS	54	54			•	82	•		54	

 THRESHOLDS
 54
 54
 54
 82
 54

 EXCEEDS THRESHOLD (BOLD FONT)?
 NO
 NO
 NO
 NO

#### **OPERATIONAL EMISSIONS SUMMARY**

**EXCEEDS THRESHOLD?** 

NO

NO

				A	NNUAL EMIS	SSIONS (TO	NS)				
						PM10			PM2.5		
SOURCE	ROG	NOX	со	SO2	FUG	EXH	TOT	FUG	EXH	TOT	MT CO2e
AREA	0.53	0.01	0.86	0.00	0.00	0.04	0.04	0.00	0.04	0.04	6.44
ENERGY	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	138.16
MOBILE	0.08	0.37	0.92	0.00	0.24	0.00	0.24	0.07	0.00	0.07	265.40
WASTE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.74
WATER	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.92
TOTAL	0.61	0.41	1.79	0.00	0.24	0.04	0.28	0.07	0.04	0.11	447.66
WITHOUT HEARTH	0.42	0.41	1.53	0.00	0.24	0.00	0.24	0.07	0.00	0.07	442.23
THRESHOLDS	10	10					15			10	
EXCEEDS THRESHOLD?	NO	NO					NO			NO	
								AMOR1	<b>FIZED CONS</b>	TRUCTION:	17.71
							TOTAL W	ITH AMOR	<b>FIZED CONS</b>	TRUCTION:	465.37
					TOTAL WITH	AMORTIZE	D CONSTRU	JCTION AND	EXCLUDIN	G HEARTH:	459.94
TRHESHOLD 1.100									1.100		

TRHESHOLD 1,1

EXCEEDS THRESHOLD? NO

NO

		SUMMER DAILY EMISSIONS (LBS)								
						PM10			PM2.5	
SOURCE	ROG	NOX	СО	SO2	FUG	EXH	TOT	FUG	EXH	TOT
AREA	35.30	0.81	50.72	0.09	0.00	6.29	6.29	0.00	6.29	6.29
ENERGY	0.02	0.18	0.08	0.00	0.00	0.01	0.01	0.00	0.01	0.01
MOBILE	0.53	1.94	5.36	0.01	1.37	0.02	1.38	0.37	0.02	0.38
TOTAL	35.85	2.93	56.16	0.10	1.37	6.32	7.68	0.37	6.32	6.68
THRESHOLDS	54	54	•	•	•		82	•		54
EXCEEDS THRESHOLD?	NO	NO					NO			NO

		WINTER DAILY EMISSIONS (LBS)									
						PM10			PM2.5		
SOURCE	ROG	NOX	со	SO2	FUG	EXH	тот	FUG	EXH	TOT	
AREA	35.30	0.81	50.72	0.09	0.00	6.29	6.29	0.00	6.29	6.29	
ENERGY	0.02	0.18	0.08	0.00	0.00	0.01	0.01	0.00	0.01	0.01	
MOBILE	0.44	2.05	5.35	0.02	1.37	0.02	1.38	0.37	0.02	0.38	
TOTAL	35.76	3.04	56.15	0.11	1.37	6.32	7.68	0.37	6.32	6.68	
THRESHOLDS	54	54					82			54	

NO

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

## Clayton Senior Housing Project Contra Costa County, Annual

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	28.72	1000sqft	0.66	28,720.00	0
Apartments Mid Rise	81.00	Dwelling Unit	2.50	70,000.00	232

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)58

Climate Zone 4 Operational Year 2020

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 641.35
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2 Page 2 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

Project Characteristics -

Land Use - 81 units total. 86 parking spaces.

Construction Phase - Construction assumptions are based on model defaults. Assumes 120 days arch coating (after construction of initial res units anticipated to occur over an approx. 5 mo period).

Off-road Equipment - Demolition is based on default equipment. Brush/tree removal includes 2 chainsaws (8 bhp) and 1 Vermeer Chipper (130 bhp).

Trips and VMT - Trips are based on model defaults. Demo includes additional 14 haul trucks for tree, brush, fencing, conc. and misc. mat. removal (excluding structures) per project applicant/demo contractor.

Demolition - Assumes 6535 sf building floor area to be demolished.

Architectural Coating - Based on model defaults.

Vehicle Trips - Assumes trip generation rate of 3.44/unit based on traffic analysis. Conservatively assumes same trip generation rate for weekend trips.

Water And Wastewater - Excludes septic systems.

Construction Off-road Equipment Mitigation - Includes watering of exposed surfaces.

Area Mitigation -

Energy Mitigation - Mitigation assumes installation of PV solar system providing 50% of electricity use.

Off-road Equipment - Based on model defaults.

Clayton Senior Housing Project - Contra Costa County, Annual

Page 3 of 33

Date: 11/9/2019 12:04 PM

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	1,723.00	1,416.00
tblAreaCoating	Area_Parking	1723	1416
tblConstructionPhase	NumDays	18.00	120.00
tblConstructionPhase	NumDays	230.00	220.00
tblConstructionPhase	NumDays	8.00	6.00
tblConstructionPhase	NumDays	18.00	10.00
tblConstructionPhase	NumDays	5.00	3.00
tblGrading	AcresOfGrading	3.00	4.00
tblLandUse	LandUseSquareFeet	81,000.00	70,000.00
tblLandUse	LotAcreage	2.13	2.50
tblTripsAndVMT	HaulingTripNumber	30.00	44.00
tblVehicleTrips	ST_TR	6.39	3.44
tblVehicleTrips	SU_TR	5.86	3.44
tblVehicleTrips	WD_TR	6.65	3.44

# 2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 4 of 33 Date: 11/9/2019 12:04 PM

### Clayton Senior Housing Project - Contra Costa County, Annual

# 2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	-/yr		
2018	0.3481	3.0160	2.2816	4.0900e- 003	0.1148	0.1752	0.2900	0.0428	0.1644	0.2072						367.8998
2019	0.5592	0.4745	0.4528	8.2000e- 004	0.0158	0.0284	0.0441	4.2200e- 003	0.0271	0.0313					! ! !	72.2708
Maximum	0.5592	3.0160	2.2816	4.0900e- 003	0.1148	0.1752	0.2900	0.0428	0.1644	0.2072						367.8998

#### **Mitigated Construction**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					tor	ns/yr							M	T/yr		
2018	0.3481	3.0160	2.2816	4.0900e- 003	0.0840	0.1752	0.2592	0.0273	0.1644	0.1916				i !	:	367.8995
	0.5592	0.4745	0.4528	8.2000e- 004	0.0158	0.0284	0.0441	4.2200e- 003	0.0271	0.0313				     		72.2708
Maximum	0.5592	3.0160	2.2816	4.0900e- 003	0.0840	0.1752	0.2592	0.0273	0.1644	0.1916						367.8995
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	23.60	0.00	9.22	33.11	0.00	6.54	0.00	0.00	0.00	0.00	0.00	0.00

Page 5 of 33

Clayton Senior Housing Project - Contra Costa County, Annual

Date: 11/9/2019 12:04 PM

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-22-2018	5-21-2018	1.1059	1.1059
2	5-22-2018	8-21-2018	0.9324	0.9324
3	8-22-2018	11-21-2018	0.9339	0.9339
4	11-22-2018	2-21-2019	0.8156	0.8156
5	2-22-2019	5-21-2019	0.3335	0.3335
6	5-22-2019	8-21-2019	0.2884	0.2884
		Highest	1.1059	1.1059

## 2.2 Overall Operational

#### **Unmitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	Γ/yr		
Area	0.5303	0.0113	0.8611	5.4000e- 004		0.0401	0.0401		0.0401	0.0401					! !	6.4370
Energy	3.7700e- 003	0.0323	0.0137	2.1000e- 004		2.6100e- 003	2.6100e- 003	1       	2.6100e- 003	2.6100e- 003				1       	1	138.1623
Mobile	0.0812	0.3646	0.9240	2.9000e- 003	0.2404	2.8800e- 003	0.2432	0.0645	2.7000e- 003	0.0672				1       	1	265.3952
Waste	6;		1       	1 1 1		0.0000	0.0000	1       	0.0000	0.0000				1       	1	18.7381
Water	6;		1       	1 1 1		0.0000	0.0000	1       	0.0000	0.0000				1       	1       	18.9243
Total	0.6152	0.4081	1.7988	3.6500e- 003	0.2404	0.0456	0.2860	0.0645	0.0454	0.1099						447.6569

CalEEMod Version: CalEEMod.2016.3.2 Page 6 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

## 2.2 Overall Operational

#### **Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Area	0.3434	6.9800e- 003	0.6037	3.0000e- 005		3.3200e- 003	3.3200e- 003		3.3200e- 003	3.3200e- 003					i i	1.0069
Energy	3.7700e- 003	0.0323	0.0137	2.1000e- 004		2.6100e- 003	2.6100e- 003		2.6100e- 003	2.6100e- 003					, , , ,	87.8640
Mobile	0.0812	0.3646	0.9240	2.9000e- 003	0.2404	2.8800e- 003	0.2432	0.0645	2.7000e- 003	0.0672					, , , ,	265.3952
Waste	6; 0; 0; 0; 0;	,	,			0.0000	0.0000		0.0000	0.0000					,	18.7381
Water	6,	,	,		<del></del>	0.0000	0.0000		0.0000	0.0000					,	18.9243
Total	0.4283	0.4038	1.5414	3.1400e- 003	0.2404	8.8100e- 003	0.2492	0.0645	8.6300e- 003	0.0731						391.9285

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	30.38	1.05	14.31	13.97	0.00	80.68	12.87	0.00	81.00	33.47	0.00	0.00	0.00	0.00	0.00	12.45

#### 3.0 Construction Detail

#### **Construction Phase**

#### Clayton Senior Housing Project - Contra Costa County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/22/2018	3/21/2018	5	20	
2	Site Preparation	Site Preparation	3/22/2018	3/26/2018	5	3	
3	Grading	Grading	3/27/2018	4/3/2018	5	6	
4	Building Construction	Building Construction	4/4/2018	2/5/2019	5	220	
5	Paving	Paving	2/6/2019	2/19/2019	5	10	
6	Architectural Coating	Architectural Coating	2/20/2019	8/6/2019	5	120	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.66

Residential Indoor: 141,750; Residential Outdoor: 47,250; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,416 (Architectural Coating – sqft)

OffRoad Equipment

Page 8 of 33

Clayton Senior Housing Project - Contra Costa County, Annual

Date: 11/9/2019 12:04 PM

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT** 

Clayton Senior Housing Project - Contra Costa County, Annual

Date: 11/9/2019 12:04 PM

Page 9 of 33

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	44.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	70.00	13.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

## **3.1 Mitigation Measures Construction**

Water Exposed Area

#### 3.2 **Demolition - 2018**

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Fugitive Dust					3.2200e- 003	0.0000	3.2200e- 003	4.9000e- 004	0.0000	4.9000e- 004						0.0000
	0.0372	0.3832	0.2230	3.9000e- 004		0.0194	0.0194		0.0181	0.0181					1 1 1 1	35.3660
Total	0.0372	0.3832	0.2230	3.9000e- 004	3.2200e- 003	0.0194	0.0226	4.9000e- 004	0.0181	0.0185						35.3660

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

3.2 Demolition - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
1	2.1000e- 004	7.2100e- 003	1.2800e- 003	2.0000e- 005	3.7000e- 004	3.0000e- 005	4.0000e- 004	1.0000e- 004	3.0000e- 005	1.3000e- 004						1.7035
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
1	6.1000e- 004	4.7000e- 004	4.7700e- 003	1.0000e- 005	1.1900e- 003	1.0000e- 005	1.2000e- 003	3.2000e- 004	1.0000e- 005	3.2000e- 004						1.1123
Total	8.2000e- 004	7.6800e- 003	6.0500e- 003	3.0000e- 005	1.5600e- 003	4.0000e- 005	1.6000e- 003	4.2000e- 004	4.0000e- 005	4.5000e- 004						2.8159

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Fugitive Dust	11 11 11	 			1.2500e- 003	0.0000	1.2500e- 003	1.9000e- 004	0.0000	1.9000e- 004					i i	0.0000
Off-Road	0.0372	0.3832	0.2230	3.9000e- 004		0.0194	0.0194		0.0181	0.0181		i i	 		       	35.3660
Total	0.0372	0.3832	0.2230	3.9000e- 004	1.2500e- 003	0.0194	0.0206	1.9000e- 004	0.0181	0.0182						35.3660

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

3.2 Demolition - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	2.1000e- 004	7.2100e- 003	1.2800e- 003	2.0000e- 005	3.7000e- 004	3.0000e- 005	4.0000e- 004	1.0000e- 004	3.0000e- 005	1.3000e- 004						1.7035
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1			 	0.0000
Worker	6.1000e- 004	4.7000e- 004	4.7700e- 003	1.0000e- 005	1.1900e- 003	1.0000e- 005	1.2000e- 003	3.2000e- 004	1.0000e- 005	3.2000e- 004						1.1123
Total	8.2000e- 004	7.6800e- 003	6.0500e- 003	3.0000e- 005	1.5600e- 003	4.0000e- 005	1.6000e- 003	4.2000e- 004	4.0000e- 005	4.5000e- 004						2.8159

## 3.3 Site Preparation - 2018

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0271	0.0000	0.0271	0.0149	0.0000	0.0149						0.0000
Off-Road	6.8400e- 003	0.0723	0.0337	6.0000e- 005		3.8700e- 003	3.8700e- 003		3.5600e- 003	3.5600e- 003					       	5.2546
Total	6.8400e- 003	0.0723	0.0337	6.0000e- 005	0.0271	3.8700e- 003	0.0310	0.0149	3.5600e- 003	0.0185						5.2546

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

3.3 Site Preparation - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.1000e- 004	8.0000e- 005	8.6000e- 004	0.0000	2.1000e- 004	0.0000	2.2000e- 004	6.0000e- 005	0.0000	6.0000e- 005						0.2002
Total	1.1000e- 004	8.0000e- 005	8.6000e- 004	0.0000	2.1000e- 004	0.0000	2.2000e- 004	6.0000e- 005	0.0000	6.0000e- 005						0.2002

### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0106	0.0000	0.0106	5.8100e- 003	0.0000	5.8100e- 003						0.0000
1	6.8400e- 003	0.0723	0.0337	6.0000e- 005		3.8700e- 003	3.8700e- 003		3.5600e- 003	3.5600e- 003					; ! ! !	5.2546
Total	6.8400e- 003	0.0723	0.0337	6.0000e- 005	0.0106	3.8700e- 003	0.0144	5.8100e- 003	3.5600e- 003	9.3700e- 003						5.2546

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

3.3 Site Preparation - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1				0.0000
Worker	1.1000e- 004	8.0000e- 005	8.6000e- 004	0.0000	2.1000e- 004	0.0000	2.2000e- 004	6.0000e- 005	0.0000	6.0000e- 005						0.2002
Total	1.1000e- 004	8.0000e- 005	8.6000e- 004	0.0000	2.1000e- 004	0.0000	2.2000e- 004	6.0000e- 005	0.0000	6.0000e- 005						0.2002

#### 3.4 Grading - 2018

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0202	0.0000	0.0202	0.0102	0.0000	0.0102						0.0000
1	8.3200e- 003	0.0920	0.0497	9.0000e- 005		4.6500e- 003	4.6500e- 003		4.2800e- 003	4.2800e- 003					       	8.1954
Total	8.3200e- 003	0.0920	0.0497	9.0000e- 005	0.0202	4.6500e- 003	0.0248	0.0102	4.2800e- 003	0.0144						8.1954

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

3.4 Grading - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.8000e- 004	1.4000e- 004	1.4300e- 003	0.0000	3.6000e- 004	0.0000	3.6000e- 004	9.0000e- 005	0.0000	1.0000e- 004						0.3337
Total	1.8000e- 004	1.4000e- 004	1.4300e- 003	0.0000	3.6000e- 004	0.0000	3.6000e- 004	9.0000e- 005	0.0000	1.0000e- 004						0.3337

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	! !				7.8700e- 003	0.0000	7.8700e- 003	3.9600e- 003	0.0000	3.9600e- 003						0.0000
Off-Road	8.3200e- 003	0.0920	0.0497	9.0000e- 005		4.6500e- 003	4.6500e- 003		4.2800e- 003	4.2800e- 003					 	8.1953
Total	8.3200e- 003	0.0920	0.0497	9.0000e- 005	7.8700e- 003	4.6500e- 003	0.0125	3.9600e- 003	4.2800e- 003	8.2400e- 003						8.1953

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

3.4 Grading - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Weikei	1.8000e- 004	1.4000e- 004	1.4300e- 003	0.0000	3.6000e- 004	0.0000	3.6000e- 004	9.0000e- 005	0.0000	1.0000e- 004						0.3337
Total	1.8000e- 004	1.4000e- 004	1.4300e- 003	0.0000	3.6000e- 004	0.0000	3.6000e- 004	9.0000e- 005	0.0000	1.0000e- 004						0.3337

#### 3.5 Building Construction - 2018

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cirrioda	0.2599	2.2688	1.7053	2.6100e- 003		0.1455	0.1455		0.1368	0.1368						232.0469
Total	0.2599	2.2688	1.7053	2.6100e- 003		0.1455	0.1455		0.1368	0.1368						232.0469

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

# 3.5 Building Construction - 2018 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	6.9700e- 003	0.1704	0.0457	3.5000e- 004	8.2900e- 003	1.4000e- 003	9.6900e- 003	2.4000e- 003	1.3400e- 003	3.7400e- 003					,	33.3355
Worker	0.0278	0.0214	0.2158	5.6000e- 004	0.0539	3.8000e- 004	0.0542	0.0143	3.5000e- 004	0.0147					,	50.3517
Total	0.0348	0.1917	0.2615	9.1000e- 004	0.0621	1.7800e- 003	0.0639	0.0167	1.6900e- 003	0.0184						83.6872

### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cirrioda	0.2599	2.2688	1.7053	2.6100e- 003		0.1455	0.1455		0.1368	0.1368						232.0466
Total	0.2599	2.2688	1.7053	2.6100e- 003		0.1455	0.1455		0.1368	0.1368						232.0466

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

# 3.5 Building Construction - 2018 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	6.9700e- 003	0.1704	0.0457	3.5000e- 004	8.2900e- 003	1.4000e- 003	9.6900e- 003	2.4000e- 003	1.3400e- 003	3.7400e- 003		1				33.3355
Worker	0.0278	0.0214	0.2158	5.6000e- 004	0.0539	3.8000e- 004	0.0542	0.0143	3.5000e- 004	0.0147						50.3517
Total	0.0348	0.1917	0.2615	9.1000e- 004	0.0621	1.7800e- 003	0.0639	0.0167	1.6900e- 003	0.0184						83.6872

#### 3.5 Building Construction - 2019

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0307	0.2740	0.2231	3.5000e- 004		0.0168	0.0168		0.0158	0.0158						30.7497
Total	0.0307	0.2740	0.2231	3.5000e- 004		0.0168	0.0168		0.0158	0.0158						30.7497

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

# 3.5 Building Construction - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
1	8.4000e- 004	0.0215	5.6100e- 003	5.0000e- 005	1.1100e- 003	1.6000e- 004	1.2700e- 003	3.2000e- 004	1.5000e- 004	4.7000e- 004		1				4.4398
1	3.3500e- 003	2.5000e- 003	0.0256	7.0000e- 005	7.2200e- 003	5.0000e- 005	7.2700e- 003	1.9200e- 003	5.0000e- 005	1.9600e- 003						6.5441
Total	4.1900e- 003	0.0240	0.0312	1.2000e- 004	8.3300e- 003	2.1000e- 004	8.5400e- 003	2.2400e- 003	2.0000e- 004	2.4300e- 003						10.9839

### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0307	0.2740	0.2231	3.5000e- 004		0.0168	0.0168		0.0158	0.0158						30.7497
Total	0.0307	0.2740	0.2231	3.5000e- 004		0.0168	0.0168		0.0158	0.0158						30.7497

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

3.5 Building Construction - 2019 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	8.4000e- 004	0.0215	5.6100e- 003	5.0000e- 005	1.1100e- 003	1.6000e- 004	1.2700e- 003	3.2000e- 004	1.5000e- 004	4.7000e- 004						4.4398
Worker	3.3500e- 003	2.5000e- 003	0.0256	7.0000e- 005	7.2200e- 003	5.0000e- 005	7.2700e- 003	1.9200e- 003	5.0000e- 005	1.9600e- 003						6.5441
Total	4.1900e- 003	0.0240	0.0312	1.2000e- 004	8.3300e- 003	2.1000e- 004	8.5400e- 003	2.2400e- 003	2.0000e- 004	2.4300e- 003						10.9839

# 3.6 Paving - 2019

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	7/yr		
	6.3400e- 003	0.0638	0.0616	9.0000e- 005		3.6000e- 003	3.6000e- 003		3.3200e- 003	3.3200e- 003						8.4255
1	8.6000e- 004					0.0000	0.0000		0.0000	0.0000						0.0000
Total	7.2000e- 003	0.0638	0.0616	9.0000e- 005		3.6000e- 003	3.6000e- 003		3.3200e- 003	3.3200e- 003						8.4255

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

3.6 Paving - 2019

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.7000e- 004	2.8000e- 004	2.8100e- 003	1.0000e- 005	7.9000e- 004	1.0000e- 005	8.0000e- 004	2.1000e- 004	0.0000	2.2000e- 004						0.7191
Total	3.7000e- 004	2.8000e- 004	2.8100e- 003	1.0000e- 005	7.9000e- 004	1.0000e- 005	8.0000e- 004	2.1000e- 004	0.0000	2.2000e- 004						0.7191

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	6.3400e- 003	0.0638	0.0616	9.0000e- 005		3.6000e- 003	3.6000e- 003		3.3200e- 003	3.3200e- 003						8.4255
1 .	8.6000e- 004			i i		0.0000	0.0000	       	0.0000	0.0000						0.0000
Total	7.2000e- 003	0.0638	0.0616	9.0000e- 005		3.6000e- 003	3.6000e- 003		3.3200e- 003	3.3200e- 003						8.4255

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
	3.7000e- 004	2.8000e- 004	2.8100e- 003	1.0000e- 005	7.9000e- 004	1.0000e- 005	8.0000e- 004	2.1000e- 004	0.0000	2.2000e- 004						0.7191
Total	3.7000e- 004	2.8000e- 004	2.8100e- 003	1.0000e- 005	7.9000e- 004	1.0000e- 005	8.0000e- 004	2.1000e- 004	0.0000	2.2000e- 004						0.7191

# 3.7 Architectural Coating - 2019

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.4977					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0160	0.1101	0.1105	1.8000e- 004		7.7300e- 003	7.7300e- 003	1 1 1 1 1	7.7300e- 003	7.7300e- 003					; ! ! !	15.3519
Total	0.5137	0.1101	0.1105	1.8000e- 004		7.7300e- 003	7.7300e- 003		7.7300e- 003	7.7300e- 003						15.3519

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

# 3.7 Architectural Coating - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1				0.0000
Worker	3.0900e- 003	2.3100e- 003	0.0236	7.0000e- 005	6.6600e- 003	5.0000e- 005	6.7100e- 003	1.7700e- 003	4.0000e- 005	1.8100e- 003						6.0407
Total	3.0900e- 003	2.3100e- 003	0.0236	7.0000e- 005	6.6600e- 003	5.0000e- 005	6.7100e- 003	1.7700e- 003	4.0000e- 005	1.8100e- 003						6.0407

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.4977	 				0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0160	0.1101	0.1105	1.8000e- 004		7.7300e- 003	7.7300e- 003		7.7300e- 003	7.7300e- 003			 		 	15.3519
Total	0.5137	0.1101	0.1105	1.8000e- 004		7.7300e- 003	7.7300e- 003		7.7300e- 003	7.7300e- 003						15.3519

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 33 Date: 11/9/2019 12:04 PM

### Clayton Senior Housing Project - Contra Costa County, Annual

# 3.7 Architectural Coating - 2019 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1				0.0000
Worker	3.0900e- 003	2.3100e- 003	0.0236	7.0000e- 005	6.6600e- 003	5.0000e- 005	6.7100e- 003	1.7700e- 003	4.0000e- 005	1.8100e- 003						6.0407
Total	3.0900e- 003	2.3100e- 003	0.0236	7.0000e- 005	6.6600e- 003	5.0000e- 005	6.7100e- 003	1.7700e- 003	4.0000e- 005	1.8100e- 003						6.0407

# 4.0 Operational Detail - Mobile

## **4.1 Mitigation Measures Mobile**

#### Clayton Senior Housing Project - Contra Costa County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.0812	0.3646	0.9240	2.9000e- 003	0.2404	2.8800e- 003	0.2432	0.0645	2.7000e- 003	0.0672						265.3952
Unmitigated	0.0812	0.3646	0.9240	2.9000e- 003	0.2404	2.8800e- 003	0.2432	0.0645	2.7000e- 003	0.0672						265.3952

### **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday Saturday Sunday Annual VMT		Annual VMT	Annual VMT	
Apartments Mid Rise	278.64	278.64	278.64	643,549	643,549
Parking Lot	0.00	0.00	0.00		
Total	278.64	278.64	278.64	643,549	643,549

## 4.3 Trip Type Information

		Miles			Trip %		Trip Purpose %				
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by		
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3		
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0		

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910
Parking Lot	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910

#### Clayton Senior Housing Project - Contra Costa County, Annual

## 5.0 Energy Detail

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						50.2983
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						100.5966
Material Control	3.7700e- 003	0.0323	0.0137	2.1000e- 004		2.6100e- 003	2.6100e- 003		2.6100e- 003	2.6100e- 003					       	37.5657
I Description of a 1	3.7700e- 003	0.0323	0.0137	2.1000e- 004		2.6100e- 003	2.6100e- 003		2.6100e- 003	2.6100e- 003					     	37.5657

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

## 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							МТ	/yr		
Apartments Mid Rise	699795	3.7700e- 003	0.0323	0.0137	2.1000e- 004		2.6100e- 003	2.6100e- 003		2.6100e- 003	2.6100e- 003						37.5657
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000					,	0.0000
Total		3.7700e- 003	0.0323	0.0137	2.1000e- 004		2.6100e- 003	2.6100e- 003		2.6100e- 003	2.6100e- 003						37.5657

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Apartments Mid Rise	699795	3.7700e- 003	0.0323	0.0137	2.1000e- 004		2.6100e- 003	2.6100e- 003		2.6100e- 003	2.6100e- 003						37.5657
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000					,	0.0000
Total		3.7700e- 003	0.0323	0.0137	2.1000e- 004		2.6100e- 003	2.6100e- 003		2.6100e- 003	2.6100e- 003						37.5657

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Apartments Mid Rise	334396				97.6609
Parking Lot	10052				2.9357
Total					100.5966

#### **Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Apartments Mid Rise	167198				48.8305
Parking Lot	5026				1.4679
Total					50.2983

#### 6.0 Area Detail

#### **6.1 Mitigation Measures Area**

### Clayton Senior Housing Project - Contra Costa County, Annual

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Mitigated	0.3434	6.9800e- 003	0.6037	3.0000e- 005		3.3200e- 003	3.3200e- 003		3.3200e- 003	3.3200e- 003						1.0069
Unmitigated	0.5303	0.0113	0.8611	5.4000e- 004		0.0401	0.0401		0.0401	0.0401						6.4370

# 6.2 Area by SubCategory

**Unmitigated** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr					MT/yr					
Architectural Coating	0.0498			! !		0.0000	0.0000	1 1 1	0.0000	0.0000						0.0000
Consumer Products	0.2752					0.0000	0.0000	       	0.0000	0.0000						0.0000
Hearth	0.1869	4.3000e- 003	0.2574	5.1000e- 004		0.0368	0.0368	1 1 1 1 1	0.0368	0.0368						5.4301
Landscaping	0.0184	6.9800e- 003	0.6037	3.0000e- 005		3.3200e- 003	3.3200e- 003		3.3200e- 003	3.3200e- 003						1.0069
Total	0.5303	0.0113	0.8611	5.4000e- 004		0.0401	0.0401		0.0401	0.0401						6.4370

CalEEMod Version: CalEEMod.2016.3.2 Page 29 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

# 6.2 Area by SubCategory Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.0498					0.0000	0.0000		0.0000	0.0000					i i	0.0000
Consumer Products	0.2752					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.0184	6.9800e- 003	0.6037	3.0000e- 005		3.3200e- 003	3.3200e- 003		3.3200e- 003	3.3200e- 003						1.0069
Total	0.3434	6.9800e- 003	0.6037	3.0000e- 005		3.3200e- 003	3.3200e- 003		3.3200e- 003	3.3200e- 003						1.0069

#### 7.0 Water Detail

# 7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2016.3.2 Page 30 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

	Total CO2	CH4	N2O	CO2e
Category		MT	-/yr	
Willigatod				18.9243
Crimingatod				18.9243

# 7.2 Water by Land Use Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	√yr	
Apartments Mid Rise	5.27748 / 3.3271				18.9243
Parking Lot	0/0				0.0000
Total					18.9243

CalEEMod Version: CalEEMod.2016.3.2 Page 31 of 33 Date: 11/9/2019 12:04 PM

#### Clayton Senior Housing Project - Contra Costa County, Annual

7.2 Water by Land Use

#### **Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	√yr	
Apartments Mid Rise	5.27748 / 3.3271				18.9243
Parking Lot	0/0				0.0000
Total					18.9243

#### 8.0 Waste Detail

## **8.1 Mitigation Measures Waste**

### Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	<sup>⊤</sup> /yr	
Mitigated	u u			18.7381
_				18.7381

Date: 11/9/2019 12:04 PM

# Clayton Senior Housing Project - Contra Costa County, Annual

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
Apartments Mid Rise	37.26				18.7381
Parking Lot	0				0.0000
Total					18.7381

#### **Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Apartments Mid Rise	37.26				18.7381
Parking Lot	0				0.0000
Total					18.7381

# 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

#### Clayton Senior Housing Project - Contra Costa County, Annual

# **10.0 Stationary Equipment**

#### **Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

#### **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

#### **User Defined Equipment**

Equipment Type	Number

# 11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 28 Date: 11/9/2019 12:17 PM

Clayton Senior Housing Project - Contra Costa County, Summer

# Clayton Senior Housing Project Contra Costa County, Summer

# 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	28.72	1000sqft	0.66	28,720.00	0
Apartments Mid Rise	81.00	Dwelling Unit	2.50	70,000.00	232

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)58Climate Zone4Operational Year2020

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 641.35
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2 Page 2 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

Project Characteristics -

Land Use - 81 units total. 86 parking spaces.

Construction Phase - Construction assumptions are based on model defaults. Assumes 120 days arch coating (after construction of initial res units anticipated to occur over an approx. 5 mo period).

Off-road Equipment - Demolition is based on default equipment. Brush/tree removal includes 2 chainsaws (8 bhp) and 1 Vermeer Chipper (130 bhp).

Trips and VMT - Trips are based on model defaults. Demo includes additional 14 haul trucks for tree, brush, fencing, conc. and misc. mat. removal (excluding structures) per project applicant/demo contractor.

Demolition - Assumes 6535 sf building floor area to be demolished.

Architectural Coating - Based on model defaults.

Vehicle Trips - Assumes trip generation rate of 3.44/unit based on traffic analysis. Conservatively assumes same trip generation rate for weekend trips.

Water And Wastewater - Excludes septic systems.

Construction Off-road Equipment Mitigation - Includes watering of exposed surfaces.

Area Mitigation -

Energy Mitigation - Mitigation assumes installation of PV solar system providing 50% of electricity use.

Off-road Equipment - Based on model defaults.

Clayton Senior Housing Project - Contra Costa County, Summer

Page 3 of 28

Date: 11/9/2019 12:17 PM

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	1,723.00	1,416.00
tblAreaCoating	Area_Parking	1723	1416
tblConstructionPhase	NumDays	18.00	120.00
tblConstructionPhase	NumDays	230.00	220.00
tblConstructionPhase	NumDays	8.00	6.00
tblConstructionPhase	NumDays	18.00	10.00
tblConstructionPhase	NumDays	5.00	3.00
tblGrading	AcresOfGrading	3.00	4.00
tblLandUse	LandUseSquareFeet	81,000.00	70,000.00
tblLandUse	LotAcreage	2.13	2.50
tblTripsAndVMT	HaulingTripNumber	30.00	44.00
tblVehicleTrips	ST_TR	6.39	3.44
tblVehicleTrips	SU_TR	5.86	3.44
tblVehicleTrips	WD_TR	6.65	3.44

# 2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 4 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

#### 2.1 Overall Construction (Maximum Daily Emission)

#### **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/e	day							lb/d	day		
2018	4.6425	48.2494	23.1113	0.0419	18.2141	2.5779	20.7920	9.9699	2.3717	12.3416					i i	4,221.156 0
2019	8.6170	22.8819	19.7611	0.0366	0.6630	1.3058	1.9688	0.1779	1.2278	1.4056		       			! ! !	3,592.678 4
Maximum	8.6170	48.2494	23.1113	0.0419	18.2141	2.5779	20.7920	9.9699	2.3717	12.3416						4,221.156 0

#### **Mitigated Construction**

0.00

Percent Reduction 0.00

0.00

0.00

58.38

0.00

48.42

Year					lb/	/day							lb/	day		
2018	4.6425	48.2494	23.1113	0.0419	7.1937	2.5779	9.7716	3.9122	2.3717	6.2839	<u>.</u>		<u> </u>	i ! !	i !	4,221.155 9
2019	8.6170	22.8819	19.7611	0.0366	0.6630	1.3058	1.9688	0.1779	1.2278	1.4056		i ! !	! ! !	: : : :	 	3,592.678 4
Maximum	8.6170	48.2494	23.1113	0.0419	7.1937	2.5779	9.7716	3.9122	2.3717	6.2839						4,221.155 9
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

59.70

0.00

44.06

0.00

0.00

0.00

0.00

0.00

0.00

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 28 Date: 11/9/2019 12:17 PM

### Clayton Senior Housing Project - Contra Costa County, Summer

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Area	35.2974	0.8140	50.7196	0.0851		6.2850	6.2850		6.2850	6.2850						1,028.026 1
Energy	0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143		0.0143	0.0143						226.8990
Mobile	0.5291	1.9378	5.3623	0.0171	1.3671	0.0158	1.3829	0.3658	0.0148	0.3806						1,722.620 0
Total	35.8471	2.9285	56.1571	0.1034	1.3671	6.3151	7.6822	0.3658	6.3141	6.6799						2,977.545 1

#### **Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	1.9853	0.0776	6.7078	3.5000e- 004		0.0369	0.0369		0.0369	0.0369						12.3328
Energy	0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143		0.0143	0.0143		!				226.8990
Mobile	0.5291	1.9378	5.3623	0.0171	1.3671	0.0158	1.3829	0.3658	0.0148	0.3806						1,722.620 0
Total	2.5351	2.1920	12.1453	0.0186	1.3671	0.0669	1.4341	0.3658	0.0660	0.4318						1,961.851 7

#### Clayton Senior Housing Project - Contra Costa County, Summer

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	92.93	25.15	78.37	82.04	0.00	98.94	81.33	0.00	98.96	93.54	0.00	0.00	0.00	0.00	0.00	34.11

#### 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/22/2018	3/21/2018	5	20	
2	Site Preparation	Site Preparation	3/22/2018	3/26/2018	5	3	
3	Grading	Grading	3/27/2018	4/3/2018	5	6	
4	Building Construction	Building Construction	4/4/2018	2/5/2019	5	220	
5	Paving	Paving	2/6/2019	2/19/2019	5	10	
6	Architectural Coating	Architectural Coating	2/20/2019	8/6/2019	5	120	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.66

Residential Indoor: 141,750; Residential Outdoor: 47,250; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,416 (Architectural Coating – sqft)

OffRoad Equipment

Page 7 of 28

Clayton Senior Housing Project - Contra Costa County, Summer

Date: 11/9/2019 12:17 PM

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT** 

Page 8 of 28

Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	44.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	70.00	13.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

#### **3.1 Mitigation Measures Construction**

Water Exposed Area

#### 3.2 **Demolition - 2018**

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					0.3216	0.0000	0.3216	0.0487	0.0000	0.0487						0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048					       	3,898.434 4
Total	3.7190	38.3225	22.3040	0.0388	0.3216	1.9386	2.2602	0.0487	1.8048	1.8535						3,898.434 4

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

3.2 Demolition - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0206	0.7067	0.1231	1.7800e- 003	0.0384	2.9300e- 003	0.0414	0.0105	2.8100e- 003	0.0133		! !				189.0810
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0665	0.0422	0.5292	1.3400e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.6000e- 004	0.0335						133.6405
Total	0.0871	0.7489	0.6523	3.1200e- 003	0.1616	3.7600e- 003	0.1654	0.0432	3.5700e- 003	0.0468						322.7216

## **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust	11 11 11				0.1254	0.0000	0.1254	0.0190	0.0000	0.0190					i i	0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048					 	3,898.434 4
Total	3.7190	38.3225	22.3040	0.0388	0.1254	1.9386	2.0640	0.0190	1.8048	1.8238						3,898.434 4

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

3.2 Demolition - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	lay		
Hauling	0.0206	0.7067	0.1231	1.7800e- 003	0.0384	2.9300e- 003	0.0414	0.0105	2.8100e- 003	0.0133						189.0810
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1				0.0000
Worker	0.0665	0.0422	0.5292	1.3400e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.6000e- 004	0.0335						133.6405
Total	0.0871	0.7489	0.6523	3.1200e- 003	0.1616	3.7600e- 003	0.1654	0.0432	3.5700e- 003	0.0468						322.7216

#### 3.3 Site Preparation - 2018

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						0.0000
	4.5627	48.1988	22.4763	0.0380	       	2.5769	2.5769		2.3708	2.3708			 		! ! !	3,861.444 8
Total	4.5627	48.1988	22.4763	0.0380	18.0663	2.5769	20.6432	9.9307	2.3708	12.3014						3,861.444 8

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 28 Date: 11/9/2019 12:17 PM

### Clayton Senior Housing Project - Contra Costa County, Summer

3.3 Site Preparation - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0798	0.0506	0.6350	1.6100e- 003	0.1479	9.9000e- 004	0.1489	0.0392	9.2000e- 004	0.0401						160.3687
Total	0.0798	0.0506	0.6350	1.6100e- 003	0.1479	9.9000e- 004	0.1489	0.0392	9.2000e- 004	0.0401						160.3687

### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730						0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769	 	2.3708	2.3708					     	3,861.444 8
Total	4.5627	48.1988	22.4763	0.0380	7.0458	2.5769	9.6228	3.8730	2.3708	6.2437						3,861.444 8

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

3.3 Site Preparation - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		! !				0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0798	0.0506	0.6350	1.6100e- 003	0.1479	9.9000e- 004	0.1489	0.0392	9.2000e- 004	0.0401		1				160.3687
Total	0.0798	0.0506	0.6350	1.6100e- 003	0.1479	9.9000e- 004	0.1489	0.0392	9.2000e- 004	0.0401						160.3687

#### 3.4 Grading - 2018

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					6.7291	0.0000	6.7291	3.3866	0.0000	3.3866						0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297	       	1.5513	1.5513		1.4272	1.4272					i i	3,011.2769
Total	2.7733	30.6725	16.5770	0.0297	6.7291	1.5513	8.2804	3.3866	1.4272	4.8138						3,011.276 9

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

3.4 Grading - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		! !				0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		<del></del>				0.0000
Worker	0.0665	0.0422	0.5292	1.3400e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.6000e- 004	0.0335		! ! ! !				133.6405
Total	0.0665	0.0422	0.5292	1.3400e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.6000e- 004	0.0335						133.6405

### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					2.6243	0.0000	2.6243	1.3208	0.0000	1.3208						0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513	1 1 1	1.4272	1.4272					 	3,011.2769
Total	2.7733	30.6725	16.5770	0.0297	2.6243	1.5513	4.1757	1.3208	1.4272	2.7480						3,011.276 9

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0665	0.0422	0.5292	1.3400e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.6000e- 004	0.0335					       	133.6405
Total	0.0665	0.0422	0.5292	1.3400e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.6000e- 004	0.0335						133.6405

#### 3.5 Building Construction - 2018

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
- Cil reduc	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099						2,636.988 3
Total	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099						2,636.988 3

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

# 3.5 Building Construction - 2018 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0706	1.7310	0.4424	3.6300e- 003	0.0880	0.0143	0.1023	0.0253	0.0137	0.0391					       	382.7847
Worker	0.3101	0.1969	2.4696	6.2600e- 003	0.5750	3.8700e- 003	0.5789	0.1525	3.5700e- 003	0.1561					       	623.6558
Total	0.3808	1.9279	2.9119	9.8900e- 003	0.6630	0.0182	0.6812	0.1779	0.0173	0.1951						1,006.440 5

### **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099						2,636.988 3
Total	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099						2,636.988 3

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

# 3.5 Building Construction - 2018 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0706	1.7310	0.4424	3.6300e- 003	0.0880	0.0143	0.1023	0.0253	0.0137	0.0391						382.7847
Worker	0.3101	0.1969	2.4696	6.2600e- 003	0.5750	3.8700e- 003	0.5789	0.1525	3.5700e- 003	0.1561						623.6558
Total	0.3808	1.9279	2.9119	9.8900e- 003	0.6630	0.0182	0.6812	0.1779	0.0173	0.1951						1,006.440 5

#### 3.5 Building Construction - 2019

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
"""	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127						2,607.363 5
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127						2,607.363 5

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

# 3.5 Building Construction - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0634	1.6308	0.4046	3.6100e- 003	0.0880	0.0121	0.1001	0.0253	0.0116	0.0369						380.4501
Worker	0.2793	0.1723	2.1927	6.0700e- 003	0.5750	3.7900e- 003	0.5788	0.1525	3.4900e- 003	0.1560						604.8649
Total	0.3427	1.8031	2.5973	9.6800e- 003	0.6630	0.0159	0.6789	0.1779	0.0151	0.1929						985.3149

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
- Cil reduc	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127						2,607.363 5
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127						2,607.363 5

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

3.5 Building Construction - 2019 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0634	1.6308	0.4046	3.6100e- 003	0.0880	0.0121	0.1001	0.0253	0.0116	0.0369						380.4501
Worker	0.2793	0.1723	2.1927	6.0700e- 003	0.5750	3.7900e- 003	0.5788	0.1525	3.4900e- 003	0.1560						604.8649
Total	0.3427	1.8031	2.5973	9.6800e- 003	0.6630	0.0159	0.6789	0.1779	0.0151	0.1929						985.3149

# 3.6 Paving - 2019

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	1.2679	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637						1,857.496 6
	0.1729		1 1 1		       	0.0000	0.0000	 	0.0000	0.0000		I I			 	0.0000
Total	1.4408	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637						1,857.496 6

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

3.6 Paving - 2019

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0798	0.0492	0.6265	1.7300e- 003	0.1643	1.0800e- 003	0.1654	0.0436	1.0000e- 003	0.0446						172.8185
Total	0.0798	0.0492	0.6265	1.7300e- 003	0.1643	1.0800e- 003	0.1654	0.0436	1.0000e- 003	0.0446						172.8185

### **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	1.2679	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637						1,857.496 6
	0.1729		1 1 1		       	0.0000	0.0000	 	0.0000	0.0000		I I			 	0.0000
Total	1.4408	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637						1,857.496 6

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

3.6 Paving - 2019

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0798	0.0492	0.6265	1.7300e- 003	0.1643	1.0800e- 003	0.1654	0.0436	1.0000e- 003	0.0446						172.8185
Total	0.0798	0.0492	0.6265	1.7300e- 003	0.1643	1.0800e- 003	0.1654	0.0436	1.0000e- 003	0.0446						172.8185

# 3.7 Architectural Coating - 2019

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	8.2947					0.0000	0.0000		0.0000	0.0000		1				0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e- 003	 	0.1288	0.1288	i i	0.1288	0.1288		 	]   		i i	282.0423
Total	8.5611	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288						282.0423

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

# 3.7 Architectural Coating - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1				0.0000
Worker	0.0559	0.0345	0.4385	1.2100e- 003	0.1150	7.6000e- 004	0.1158	0.0305	7.0000e- 004	0.0312						120.9730
Total	0.0559	0.0345	0.4385	1.2100e- 003	0.1150	7.6000e- 004	0.1158	0.0305	7.0000e- 004	0.0312						120.9730

## **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating	" " "					0.0000	0.0000	i i	0.0000	0.0000					i i	0.0000
	0.2664	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288						282.0423
Total	8.5611	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288						282.0423

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

3.7 Architectural Coating - 2019

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0559	0.0345	0.4385	1.2100e- 003	0.1150	7.6000e- 004	0.1158	0.0305	7.0000e- 004	0.0312						120.9730
Total	0.0559	0.0345	0.4385	1.2100e- 003	0.1150	7.6000e- 004	0.1158	0.0305	7.0000e- 004	0.0312						120.9730

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

#### Clayton Senior Housing Project - Contra Costa County, Summer

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	0.5291	1.9378	5.3623	0.0171	1.3671	0.0158	1.3829	0.3658	0.0148	0.3806						1,722.620 0
Unmitigated	0.5291	1.9378	5.3623	0.0171	1.3671	0.0158	1.3829	0.3658	0.0148	0.3806						1,722.620 0

#### **4.2 Trip Summary Information**

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	278.64	278.64	278.64	643,549	643,549
Parking Lot	0.00	0.00	0.00		
Total	278.64	278.64	278.64	643,549	643,549

# 4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910
Parking Lot	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

# 5.0 Energy Detail

Historical Energy Use: N

#### **5.1 Mitigation Measures Energy**

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
NaturalGas Mitigated	0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143		0.0143	0.0143						226.8990
NaturalGas Unmitigated	0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143		0.0143	0.0143		I I I				226.8990

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Apartments Mid Rise	1917.25	0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143	1 1 1	0.0143	0.0143		! !				226.8990
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	,	0.0000	0.0000						0.0000
Total		0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143		0.0143	0.0143						226.8990

#### **Mitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Apartments Mid Rise	1.91725	0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143		0.0143	0.0143						226.8990
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000					,	0.0000
Total		0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143		0.0143	0.0143						226.8990

#### 6.0 Area Detail

# **6.1 Mitigation Measures Area**

#### Clayton Senior Housing Project - Contra Costa County, Summer

No Hearths Installed

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	1.9853	0.0776	6.7078	3.5000e- 004		0.0369	0.0369		0.0369	0.0369						12.3328
Unmitigated	35.2974	0.8140	50.7196	0.0851		6.2850	6.2850		6.2850	6.2850						1,028.026 1

# 6.2 Area by SubCategory

**Unmitigated** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	0.2727					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.5082					0.0000	0.0000	1   	0.0000	0.0000						0.0000
Hearth	33.3121	0.7364	44.0118	0.0848		6.2481	6.2481	1       	6.2481	6.2481		,				1,015.693 4
Landscaping	0.2045	0.0776	6.7078	3.5000e- 004	1	0.0369	0.0369	y <del></del> : : :	0.0369	0.0369				<del></del>     		12.3328
Total	35.2974	0.8140	50.7196	0.0851		6.2850	6.2850		6.2850	6.2850						1,028.026 1

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 28 Date: 11/9/2019 12:17 PM

#### Clayton Senior Housing Project - Contra Costa County, Summer

# 6.2 Area by SubCategory

#### **Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		lb/day				lb/day										
	0.2727					0.0000	0.0000	i i i	0.0000	0.0000						0.0000
	1.5082		i	 		0.0000	0.0000	 	0.0000	0.0000			 			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 	0.0000	0.0000						0.0000
Landscaping	0.2045	0.0776	6.7078	3.5000e- 004		0.0369	0.0369	1   	0.0369	0.0369						12.3328
Total	1.9853	0.0776	6.7078	3.5000e- 004		0.0369	0.0369		0.0369	0.0369						12.3328

#### 7.0 Water Detail

## 7.1 Mitigation Measures Water

#### 8.0 Waste Detail

#### 8.1 Mitigation Measures Waste

#### 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

# 10.0 Stationary Equipment

#### Clayton Senior Housing Project - Contra Costa County, Summer

#### **Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

#### **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

#### **User Defined Equipment**

Equipment Type	Number
----------------	--------

# 11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 28 Date: 11/9/2019 12:16 PM

#### Clayton Senior Housing Project - Contra Costa County, Winter

# Clayton Senior Housing Project Contra Costa County, Winter

#### 1.0 Project Characteristics

#### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	28.72	1000sqft	0.66	28,720.00	0
Apartments Mid Rise	81.00	Dwelling Unit	2.50	70,000.00	232

#### 1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)58Climate Zone4Operational Year2020

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 641.35
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

#### 1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2 Page 2 of 28 Date: 11/9/2019 12:16 PM

#### Clayton Senior Housing Project - Contra Costa County, Winter

Project Characteristics -

Land Use - 81 units total. 86 parking spaces.

Construction Phase - Construction assumptions are based on model defaults. Assumes 120 days arch coating (after construction of initial res units anticipated to occur over an approx. 5 mo period).

Off-road Equipment - Demolition is based on default equipment. Brush/tree removal includes 2 chainsaws (8 bhp) and 1 Vermeer Chipper (130 bhp).

Trips and VMT - Trips are based on model defaults. Demo includes additional 14 haul trucks for tree, brush, fencing, conc. and misc. mat. removal (excluding structures) per project applicant/demo contractor.

Demolition - Assumes 6535 sf building floor area to be demolished.

Architectural Coating - Based on model defaults.

Vehicle Trips - Assumes trip generation rate of 3.44/unit based on traffic analysis. Conservatively assumes same trip generation rate for weekend trips.

Water And Wastewater - Excludes septic systems.

Construction Off-road Equipment Mitigation - Includes watering of exposed surfaces.

Area Mitigation -

Energy Mitigation - Mitigation assumes installation of PV solar system providing 50% of electricity use.

Off-road Equipment - Based on model defaults.

Clayton Senior Housing Project - Contra Costa County, Winter

Date: 11/9/2019 12:16 PM

Page 3 of 28

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	1,723.00	1,416.00
tblAreaCoating	Area_Parking	1723	1416
tblConstructionPhase	NumDays	18.00	120.00
tblConstructionPhase	NumDays	230.00	220.00
tblConstructionPhase	NumDays	8.00	6.00
tblConstructionPhase	NumDays	18.00	10.00
tblConstructionPhase	NumDays	5.00	3.00
tblGrading	AcresOfGrading	3.00	4.00
tblLandUse	LandUseSquareFeet	81,000.00	70,000.00
tblLandUse	LotAcreage	2.13	2.50
tblTripsAndVMT	HaulingTripNumber	30.00	44.00
tblVehicleTrips	ST_TR	6.39	3.44
tblVehicleTrips	SU_TR	5.86	3.44
tblVehicleTrips	WD_TR	6.65	3.44

# 2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 4 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

# 2.1 Overall Construction (Maximum Daily Emission)

# **Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/e	day							lb/d	day		
2018	4.6437	48.2613	23.0661	0.0418	18.2141	2.5779	20.7920	9.9699	2.3717	12.3416						4,205.528 8
2019	8.6178	22.9447	19.6488	0.0359	0.6630	1.3060	1.9690	0.1779	1.2280	1.4058		! ! ! !			i i	3,526.384 4
Maximum	8.6178	48.2613	23.0661	0.0418	18.2141	2.5779	20.7920	9.9699	2.3717	12.3416						4,205.528 8

# **Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/	/day							lb/	/day		
2018	4.6437	48.2613	23.0661	0.0418	7.1937	2.5779	9.7716	3.9122	2.3717	6.2839						4,205.528 7
2019	8.6178	22.9447	19.6488	0.0359	0.6630	1.3060	1.9690	0.1779	1.2280	1.4058	*			1 1 1	 	3,526.384 4
Maximum	8.6178	48.2613	23.0661	0.0418	7.1937	2.5779	9.7716	3.9122	2.3717	6.2839						4,205.528 7
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	58.38	0.00	48.42	59.70	0.00	44.06	0.00	0.00	0.00	0.00	0.00	0.00

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Area	35.2974	0.8140	50.7196	0.0851		6.2850	6.2850		6.2850	6.2850						1,028.026 1
Energy	0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143		0.0143	0.0143					       	226.8990
Mobile	0.4381	2.0496	5.3463	0.0158	1.3671	0.0159	1.3830	0.3658	0.0149	0.3807						1,588.723 6
Total	35.7561	3.0403	56.1411	0.1020	1.3671	6.3152	7.6823	0.3658	6.3142	6.6800						2,843.648 6

# **Mitigated Operational**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Area	1.9853	0.0776	6.7078	3.5000e- 004		0.0369	0.0369		0.0369	0.0369						12.3328
Energy	0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143		0.0143	0.0143						226.8990
Mobile	0.4381	2.0496	5.3463	0.0158	1.3671	0.0159	1.3830	0.3658	0.0149	0.3807						1,588.723 6
Total	2.4441	2.3039	12.1293	0.0172	1.3671	0.0671	1.4342	0.3658	0.0661	0.4319						1,827.955 3

#### Clayton Senior Housing Project - Contra Costa County, Winter

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	93.16	24.22	78.40	83.11	0.00	98.94	81.33	0.00	98.95	93.53	0.00	0.00	0.00	0.00	0.00	35.72

# 3.0 Construction Detail

#### **Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/22/2018	3/21/2018	5	20	
2	Site Preparation	Site Preparation	3/22/2018	3/26/2018	5	3	
3	Grading	Grading	3/27/2018	4/3/2018	5	6	
4	Building Construction	Building Construction	4/4/2018	2/5/2019	5	220	
5	Paving	Paving	2/6/2019	2/19/2019	5	10	
6	Architectural Coating	Architectural Coating	2/20/2019	8/6/2019	5	120	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 0.66

Residential Indoor: 141,750; Residential Outdoor: 47,250; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,416 (Architectural Coating – sqft)

OffRoad Equipment

Page 7 of 28

Clayton Senior Housing Project - Contra Costa County, Winter

Date: 11/9/2019 12:16 PM

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT** 

Clayton Senior Housing Project - Contra Costa County, Winter

Date: 11/9/2019 12:16 PM

Page 8 of 28

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	44.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	70.00	13.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	14.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

# **3.1 Mitigation Measures Construction**

Water Exposed Area

#### 3.2 **Demolition - 2018**

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					0.3216	0.0000	0.3216	0.0487	0.0000	0.0487						0.0000
	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048					       	3,898.434 4
Total	3.7190	38.3225	22.3040	0.0388	0.3216	1.9386	2.2602	0.0487	1.8048	1.8535						3,898.434 4

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

3.2 Demolition - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0213	0.7243	0.1347	1.7500e- 003	0.0384	2.9900e- 003	0.0414	0.0105	2.8600e- 003	0.0134		! !				185.9897
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000					       	0.0000
Worker	0.0675	0.0521	0.4915	1.2200e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.6000e- 004	0.0335		1			       	121.1046
Total	0.0888	0.7764	0.6262	2.9700e- 003	0.1616	3.8200e- 003	0.1655	0.0432	3.6200e- 003	0.0468						307.0944

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					0.1254	0.0000	0.1254	0.0190	0.0000	0.0190						0.0000
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048					! ! !	3,898.434 4
Total	3.7190	38.3225	22.3040	0.0388	0.1254	1.9386	2.0640	0.0190	1.8048	1.8238						3,898.434 4

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

3.2 Demolition - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	lay		
Hauling	0.0213	0.7243	0.1347	1.7500e- 003	0.0384	2.9900e- 003	0.0414	0.0105	2.8600e- 003	0.0134						185.9897
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		,				0.0000
Worker	0.0675	0.0521	0.4915	1.2200e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.6000e- 004	0.0335						121.1046
Total	0.0888	0.7764	0.6262	2.9700e- 003	0.1616	3.8200e- 003	0.1655	0.0432	3.6200e- 003	0.0468						307.0944

# 3.3 Site Preparation - 2018

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307						0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708						3,861.444 8
Total	4.5627	48.1988	22.4763	0.0380	18.0663	2.5769	20.6432	9.9307	2.3708	12.3014						3,861.444 8

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

3.3 Site Preparation - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1				0.0000
Worker	0.0810	0.0625	0.5898	1.4600e- 003	0.1479	9.9000e- 004	0.1489	0.0392	9.2000e- 004	0.0401						145.3256
Total	0.0810	0.0625	0.5898	1.4600e- 003	0.1479	9.9000e- 004	0.1489	0.0392	9.2000e- 004	0.0401						145.3256

# **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730						0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769	 	2.3708	2.3708					     	3,861.444 8
Total	4.5627	48.1988	22.4763	0.0380	7.0458	2.5769	9.6228	3.8730	2.3708	6.2437						3,861.444 8

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

3.3 Site Preparation - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0810	0.0625	0.5898	1.4600e- 003	0.1479	9.9000e- 004	0.1489	0.0392	9.2000e- 004	0.0401						145.3256
Total	0.0810	0.0625	0.5898	1.4600e- 003	0.1479	9.9000e- 004	0.1489	0.0392	9.2000e- 004	0.0401						145.3256

# 3.4 Grading - 2018

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					6.7291	0.0000	6.7291	3.3866	0.0000	3.3866						0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513		1.4272	1.4272						3,011.2769
Total	2.7733	30.6725	16.5770	0.0297	6.7291	1.5513	8.2804	3.3866	1.4272	4.8138						3,011.276 9

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

3.4 Grading - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0675	0.0521	0.4915	1.2200e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.6000e- 004	0.0335						121.1046
Total	0.0675	0.0521	0.4915	1.2200e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.6000e- 004	0.0335						121.1046

# **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Fugitive Dust					2.6243	0.0000	2.6243	1.3208	0.0000	1.3208		i i				0.0000
Off-Road	2.7733	30.6725	16.5770	0.0297		1.5513	1.5513	 	1.4272	1.4272		 			 	3,011.2769
Total	2.7733	30.6725	16.5770	0.0297	2.6243	1.5513	4.1757	1.3208	1.4272	2.7480						3,011.276 9

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

3.4 Grading - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0675	0.0521	0.4915	1.2200e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.6000e- 004	0.0335		! ! !				121.1046
Total	0.0675	0.0521	0.4915	1.2200e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.6000e- 004	0.0335						121.1046

# 3.5 Building Construction - 2018

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099						2,636.988 3
Total	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099						2,636.988

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

# 3.5 Building Construction - 2018 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0739	1.7572	0.5052	3.5400e- 003	0.0880	0.0146	0.1025	0.0253	0.0139	0.0393						373.3624
Worker	0.3151	0.2431	2.2937	5.6700e- 003	0.5750	3.8700e- 003	0.5789	0.1525	3.5700e- 003	0.1561						565.1549
Total	0.3890	2.0002	2.7989	9.2100e- 003	0.6630	0.0184	0.6814	0.1779	0.0175	0.1953						938.5173

# **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
- Cirrioda	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099						2,636.988 3
Total	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099						2,636.988 3

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

# 3.5 Building Construction - 2018 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0739	1.7572	0.5052	3.5400e- 003	0.0880	0.0146	0.1025	0.0253	0.0139	0.0393						373.3624
Worker	0.3151	0.2431	2.2937	5.6700e- 003	0.5750	3.8700e- 003	0.5789	0.1525	3.5700e- 003	0.1561					       	565.1549
Total	0.3890	2.0002	2.7989	9.2100e- 003	0.6630	0.0184	0.6814	0.1779	0.0175	0.1953						938.5173

# 3.5 Building Construction - 2019

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127						2,607.363 5
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127						2,607.363 5

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

# 3.5 Building Construction - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0664	1.6533	0.4632	3.5200e- 003	0.0880	0.0123	0.1003	0.0253	0.0118	0.0371					       	370.9639
Worker	0.2832	0.2127	2.0218	5.5000e- 003	0.5750	3.7900e- 003	0.5788	0.1525	3.4900e- 003	0.1560					       	548.0570
Total	0.3496	1.8659	2.4850	9.0200e- 003	0.6630	0.0161	0.6791	0.1779	0.0153	0.1931						919.0209

# **Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
- Cirricad	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127						2,607.363 5
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127						2,607.363 5

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

3.5 Building Construction - 2019 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0664	1.6533	0.4632	3.5200e- 003	0.0880	0.0123	0.1003	0.0253	0.0118	0.0371						370.9639
Worker	0.2832	0.2127	2.0218	5.5000e- 003	0.5750	3.7900e- 003	0.5788	0.1525	3.4900e- 003	0.1560		! ! !				548.0570
Total	0.3496	1.8659	2.4850	9.0200e- 003	0.6630	0.0161	0.6791	0.1779	0.0153	0.1931						919.0209

# 3.6 Paving - 2019

**Unmitigated Construction On-Site** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Off-Road	1.2679	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637						1,857.496 6
	0.1729				 	0.0000	0.0000	 	0.0000	0.0000		 			 	0.0000
Total	1.4408	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637						1,857.496 6

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

3.6 Paving - 2019

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000					,	0.0000
Worker	0.0809	0.0608	0.5776	1.5700e- 003	0.1643	1.0800e- 003	0.1654	0.0436	1.0000e- 003	0.0446					,	156.5877
Total	0.0809	0.0608	0.5776	1.5700e- 003	0.1643	1.0800e- 003	0.1654	0.0436	1.0000e- 003	0.0446						156.5877

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
- Cir Nodu	1.2679	12.7604	12.3130	0.0189	! !	0.7196	0.7196		0.6637	0.6637						1,857.496 6
	0.1729		 			0.0000	0.0000		0.0000	0.0000						0.0000
Total	1.4408	12.7604	12.3130	0.0189		0.7196	0.7196		0.6637	0.6637						1,857.496 6

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0809	0.0608	0.5776	1.5700e- 003	0.1643	1.0800e- 003	0.1654	0.0436	1.0000e- 003	0.0446						156.5877
Total	0.0809	0.0608	0.5776	1.5700e- 003	0.1643	1.0800e- 003	0.1654	0.0436	1.0000e- 003	0.0446						156.5877

# 3.7 Architectural Coating - 2019

**Unmitigated Construction On-Site** 

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Archit. Coating	8.2947					0.0000	0.0000		0.0000	0.0000						0.0000
	0.2664	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288						282.0423
Total	8.5611	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288						282.0423

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

# 3.7 Architectural Coating - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		1				0.0000
Worker	0.0566	0.0425	0.4044	1.1000e- 003	0.1150	7.6000e- 004	0.1158	0.0305	7.0000e- 004	0.0312						109.6114
Total	0.0566	0.0425	0.4044	1.1000e- 003	0.1150	7.6000e- 004	0.1158	0.0305	7.0000e- 004	0.0312						109.6114

# **Mitigated Construction On-Site**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Archit. Coating		i i	i i		! !	0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288			 			282.0423
Total	8.5611	1.8354	1.8413	2.9700e- 003		0.1288	0.1288		0.1288	0.1288						282.0423

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

# 3.7 Architectural Coating - 2019 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		! !				0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000					;	0.0000
Worker	0.0566	0.0425	0.4044	1.1000e- 003	0.1150	7.6000e- 004	0.1158	0.0305	7.0000e- 004	0.0312					;	109.6114
Total	0.0566	0.0425	0.4044	1.1000e- 003	0.1150	7.6000e- 004	0.1158	0.0305	7.0000e- 004	0.0312						109.6114

# 4.0 Operational Detail - Mobile

# **4.1 Mitigation Measures Mobile**

# Clayton Senior Housing Project - Contra Costa County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Mitigated	0.4381	2.0496	5.3463	0.0158	1.3671	0.0159	1.3830	0.3658	0.0149	0.3807						1,588.723 6
Unmitigated	0.4381	2.0496	5.3463	0.0158	1.3671	0.0159	1.3830	0.3658	0.0149	0.3807						1,588.723 6

# **4.2 Trip Summary Information**

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	278.64	278.64	278.64	643,549	643,549
Parking Lot	0.00	0.00	0.00		
Total	278.64	278.64	278.64	643,549	643,549

# **4.3 Trip Type Information**

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	10.80	4.80	5.70	31.00	15.00	54.00	86	11	3
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

#### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910
Parking Lot	0.577244	0.040114	0.186710	0.126359	0.018084	0.005120	0.010527	0.023222	0.001588	0.001850	0.005513	0.002759	0.000910

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

# 5.0 Energy Detail

Historical Energy Use: N

# **5.1 Mitigation Measures Energy**

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
NaturalGas Mitigated	0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143		0.0143	0.0143						226.8990
NaturalGas Unmitigated	0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143		0.0143	0.0143						226.8990

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

# 5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Apartments Mid Rise	1917.25	0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143	1 1 1	0.0143	0.0143		! !				226.8990
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	,	0.0000	0.0000					     	0.0000
Total		0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143		0.0143	0.0143						226.8990

# **Mitigated**

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/c	lay		
Apartments Mid Rise	1.91725	0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143		0.0143	0.0143						226.8990
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000					,	0.0000
Total		0.0207	0.1767	0.0752	1.1300e- 003		0.0143	0.0143		0.0143	0.0143						226.8990

#### 6.0 Area Detail

# **6.1 Mitigation Measures Area**

# Clayton Senior Housing Project - Contra Costa County, Winter

No Hearths Installed

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Mitigated	1.9853	0.0776	6.7078	3.5000e- 004		0.0369	0.0369		0.0369	0.0369						12.3328
Unmitigated	35.2974	0.8140	50.7196	0.0851		6.2850	6.2850		6.2850	6.2850					i i	1,028.026 1

# 6.2 Area by SubCategory

**Unmitigated** 

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	0.2727					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	1.5082		   			0.0000	0.0000		0.0000	0.0000			     			0.0000
Hearth	33.3121	0.7364	44.0118	0.0848		6.2481	6.2481		6.2481	6.2481			     			1,015.693 4
Landscaping	0.2045	0.0776	6.7078	3.5000e- 004		0.0369	0.0369		0.0369	0.0369						12.3328
Total	35.2974	0.8140	50.7196	0.0851		6.2850	6.2850		6.2850	6.2850						1,028.026 1

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 28 Date: 11/9/2019 12:16 PM

# Clayton Senior Housing Project - Contra Costa County, Winter

# 6.2 Area by SubCategory Mitigated

# ROG NOX CO SO2 Fugitive E

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					lb/d	day							lb/d	day		
Architectural Coating	0.2727		 			0.0000	0.0000		0.0000	0.0000					 	0.0000
	1.5082		 			0.0000	0.0000		0.0000	0.0000			 	 	 	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			 	 	 	0.0000
Landscaping	0.2045	0.0776	6.7078	3.5000e- 004		0.0369	0.0369		0.0369	0.0369			 		i i	12.3328
Total	1.9853	0.0776	6.7078	3.5000e- 004		0.0369	0.0369		0.0369	0.0369						12.3328

# 7.0 Water Detail

# 7.1 Mitigation Measures Water

#### 8.0 Waste Detail

# 8.1 Mitigation Measures Waste

# 9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

# 10.0 Stationary Equipment

# Clayton Senior Housing Project - Contra Costa County, Winter

# **Fire Pumps and Emergency Generators**

Equipment Type Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
-----------------------	-----------	------------	-------------	-------------	-----------

# **Boilers**

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

# **User Defined Equipment**

Equipment Type	Number
----------------	--------

# 11.0 Vegetation

# **Attachment I**

Peer reviews of Biological Assessment and Air Quality/GHG Assessment by Raney Planning & Management





September 19, 2018

Mindy Gentry Community Development Director City of Clayton 6000 Heritage Trail Clayton, CA

#### NORTHERN CALIFORNIA

1501 SPORTS DRIVE, SUITE A SACRAMENTO, CA 95834

TEL: 916.372.6100 FAX: 916.419.6108

#### Subject: Peer Review of Biological Memo for Clayton Senior Housing Project

Dear Ms. Gentry;

Raney has completed a peer review of the report entitled 6170 High Street/6450 Marsh Creek Road, 6490 Marsh Creek Road – Response to Biological Questions from City of Clayton memo dated 12/22/17, prepared by Olberding Environmental and dated January 22, 2018. The purpose of the assessment, as stated on page 1, was to determine the current presence or absence of any special-status plant and/or wildlife species that may be present on or adjacent to the properties, as well as to assess the habitats on these properties to determine if any are of a sensitive habitat type, such as wetlands.

The City is in the process of trying to determine whether the proposed project qualifies for the Class 32 Infill Exemption included in the California Environmental Quality Act (CEQA) Guidelines. As discussed with the City of Clayton, the Memo should be updated to specifically focus on determining whether the project site has value as habitat for endangered, rare or threatened species, as this is one of the specific conditions identified in the Class 32 Infill Exemption in the CEQA Guidelines, as follows:

Class 32 consists of projects characterized as in-fill development meeting the conditions described in this section.

- (a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.
- (b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.
- (c) The project site has no value as habitat for endangered, rare or threatened species.
- (d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.
- (e) The site can be adequately served by all required utilities and public services.

Thus, rather than being broad in scope, as is currently the case, the Memo should be specific to the question of whether the project site has value as habitat for endangered, rare or threatened species.

In addition to this request, Raney would like to note the following regarding the methodology of the report.

#### Methodology

The methods employed by Olberding Environmental are in general conformance with industry standard practice for biological assessments. For example, the report includes a search of the California Natural Diversity Database (CNDDB) maintained by the California Department of Fish and Wildlife, and reports the special-status species recorded within an extended radius around the project site (presumably 5 miles). While the report did not query the California Native Plant Society's (CNPS) online Inventory of Rare and Endangered Plants, a search of the Clayton 7.5-minute USGS topographic quadrangle by Raney only yielded one additional plant species not identified in Figure 3 of Olberding's report. The additional species is fragrant fritillary (*Fritillaria liliacea*), and the recorded occurrence is located outside (SW) of the radius in Figure 3 of the report, within Diablo Foothills Regional Park. This CNPS 1.B species is not anticipated to occur on the project site due to historical site disturbance and relative lack of suitable habitat.

While the field survey methodology is sufficient, it was conducted outside of the blooming period for special-status plants known to occur in the vicinity. Olberding Environmental acknowledges this point.

#### Conclusion

I look forward to receiving the revised Memo, at which time I will perform a subsequent peer review. Please contact me at (916) 372-6100 if you have any questions regarding this peer review.

Sincerely,

Nick Pappani Vice President Raney Planning and Management, Inc.



July 20, 2018

Ms. Mindy Gentry Community Development Director 6000 Heritage Trail Clayton, CA, 94517

#### WWW.RANEYMANAGEMENT.COM

#### NORTHERN CALIFORNIA

1501 SPORTS DRIVE SMITE A SACRAMENTO, CA 95834

TEL: 916.372.6100 · FAX: 916.419.6108

Subject: Peer Review of the Air Quality/Greenhouse Gas Analysis for the Clayton Senior Housing Project

Dear Ms. Gentry:

Raney Planning & Management, Inc. (Raney) has reviewed the Technical Memorandum title *Air Quality & Greenhouse Gas Impact Assessment for the Proposed Clayton Senior Housing Project, Clayton, CA* prepared by Ambient Consulting for the proposed Clayton Senior Housing Project on February 24, 2018. In general, Raney has concluded that the Air Quality/Greenhouse Gas analysis was generally completed in accordance with current industry standards, and in compliance with the recommended guidance of the Bay Area Air Quality Management District (BAAQMD). The general methodology of the Technical Memorandum included estimating potential air quality and greenhouse gas (GHG) emissions from construction and operation of the proposed project, using the most-up-to-date version of the California Emissions Estimator Model (CalEEMod) software. To assess the adequacy of the Air Quality/GHG analysis presented in the Technical Memorandum, Raney reviewed the methods, assumptions, and CalEEMod outputs provided by Ambient Consulting. Based on Raney's review of the Technical Memorandum, several items (listed below) should be addressed.

#### I. Confirm Volume of Demolition Material to Be Removed from Site

Page 2 of the Technical Memorandum states that an estimated 6,535 square feet (sf) of building area would be demolished as part of implementation of the proposed project. Although the 6,535 sf captures the structural areas to be removed, the Demolition & Tree Removal Plans prepared for each property show that the proposed project would require the removal of similar amounts of other materials. For instance, the 6490 Marsh Creek Road site would require the removal of 8,850 sf of material and 99 trees while the 6450 Marsh Creek Road site would require the removal of 8,121 sf of material, 604 linear feet of fencing, and 16 trees, all of which would be in addition to the structures being removed from each site. The CalEEMod emissions modeling should reflect the entire scope of material removal from the site to provide full estimation of emissions from hauling, demolition, and site preparation activity. Therefore, the amount of demolition material and material export should be confirmed to provide a complete picture of construction related emissions.

#### II. Update Trip-Generation Rate Used for Operational Emissions

Page 2 of the Technical Memorandum states that a daily trip-generation rate of 3.44 vehicle trips/dwelling unit was applied to the project modeling. Such a trip rate would be consistent with the Trip Generation Study prepared for the proposed project by Kimley Horn on May 8, 2017. However, the Section 4.2 Trip



Summary Information, on page 23 of the CalEEMod Annual outputs appears to show that a different trip rate was used for emissions modeling of the proposed project. At 81 units, a trip rate of 3.44 trips per unit would result in approximately 279 average daily trips (ADT). However, Section 4.2 Trip Summary Information, of the CalEEMod Annual outputs, shows 538.65 ADT occurring on weekdays, 517.59 ADT occurring on Saturdays, and 474.66 ADT occurring on Sundays. Furthermore, CalEEMod typically reports user entered information, including user entered trip rates in Section 1.3 User Entered Comments & Non-Default Data on pages one and two of the CalEEMod outputs. The CalEEMod outputs attached to the Technical Memorandum do not depict changes to the default trip rate for the land use. In fact, 538.65 ADT for an 81 unit development would equate to a daily trip rate of 6.65 trips per unit, which is nearly double the trip rate provided for the proposed project by Kimley Horn, and is the default trip rate for the Mid-Rise Apartments land use used for the proposed project.

Considering that the CalEEMod emissions estimation completed for the proposed project relied upon default trip rates that are higher than the trip rates anticipated for the proposed project, the modeling outputs and estimated mobile emissions would be considered conservative. However, the use of default trip rates creates disagreement between the user notes contained within Section 1.3 User Entered Comments & Non-Default Data on page two of the CalEEMod outputs, and the Trip Generation Study prepared by Kimley Horn. To avoid internal inconsistencies within the report and any future environmental documentation, the operational emissions of the proposed project should be re-modeled to reflect the trip rates provided by Kimley Horn for the proposed project.

#### III. Update Discussion of Localized Carbon Monoxide

The Technical Memorandum applies BAAQMD's screening criteria for potential impacts related to carbon monoxide (CO) emissions resulting from increases in traffic due to project trips. However, the Technical Memorandum misinterprets the screening criteria by concluding on page six that because the project would only involve a peak hour trip rate of 42 vehicles per hour (vph) "the proposed project would not exceed the minimum screening criteria of 24,000 vph." The BAAQMD's screening thresholds for CO do not require that a project alone contribute more than 24,000 vph. Rather, BAAQMD's screening criteria would be triggered if the project's traffic in combination with existing levels would exceed 24,000 vph where air mixing is limited or 44,000 vph where air mixing is not limited. For clarification, the BAAQMD's screening criteria for road volumes are presented below:

- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour.
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

Based on the BAAQMD's screening criteria, demonstrating that project trip generation alone would not exceed 24,000 vph is insufficient. Instead, the analysis must show that project-related trips in combination with existing traffic levels would not exceed 24,000 vph where air mixing is limited or 44,000 vph where air mixing is not limited. Therefore, the analysis of localized CO should be updated to discuss existing traffic volumes in the project area in combination with project generated traffic.

In conclusion, while the overall methodology and approach used in the Technical Memorandum is sound, various issues remain within the Technical Memorandum. In particular, the amount of material export and demolition waste related to project implementation should be confirmed, and if necessary, the project modeling updated; the trip generation rates should be updated to match the rates provided by Kimley Horn for the proposed project; and the discussion of localized CO emissions should be updated to better reflect the requirements of BAAQMD.

This concludes Raney's peer review of the Technical Memorandum. If you have any questions regarding the contents of this peer review, please do not hesitate to contact me at (916) 372-6100, or <a href="mailto:rods@raneymanagement.com">rods@raneymanagement.com</a>.

Sincerely,

Rod Stinson
Division Manager/Air Quality Specialist



1501 Sports Drive, Suite A Sacramento, CA 95834 Office: (916) 372-6100

Fax: (916) 419-6108

www.raneymanagement.com



September 7, 2018

Ms. Mindy Gentry Community Development Director 6000 Heritage Trail Clayton, CA, 94517

#### WWW.RANEYMANAGEMENT.COM

#### NORTHERN CALIFORNIA

1501 SPORTS DRIVE SMITE A SACRAMENTO, CA 95834

TEL: 916.372.6100 · FAX: 916.419.6108

Subject: Subsequent Peer Review of the Air Quality/Greenhouse Gas Analysis for the Clayton Senior Housing Project

Dear Ms. Gentry:

Raney Planning & Management, Inc. (Raney) has reviewed the updated Technical Memorandum title *Air Quality & Greenhouse Gas Impact Assessment for the Proposed Clayton Senior Housing Project, Clayton, CA* prepared by Ambient Consulting for the proposed Clayton Senior Housing Project on August 14, 2018. Raney previously provided comments on the draft of the Technical Memorandum prepared on February 24, 2018. The updates to the Technical Report adequately addressed the majority of Raney's comments. However, the response provided to Comment I, regarding confirmation of the volume of demolition material to be removed from the site, requires further justification by Ambient Consulting to substantiate the changes made to project modeling.

As noted in Raney's peer review, the original Technical Memorandum stated that an estimated 6,535 square feet (sf) of building area would be demolished as part of implementation of the proposed project. However, the Demolition & Tree Removal Plans prepared for each property show that the proposed project would require the removal of other material such as existing asphalt, structure, gravel and rock. Page 2 of the updated Technical Memorandum notes that additional assumptions were included in project modeling to capture the removal of trees, brush, and miscellaneous materials. Furthermore, the CalEEMod outputs attached to the updated Technical Memorandum show the inclusion of additional pieces of construction machinery and an increase in the number of construction-related haul trips from the site. The likely intent of such changes was to respond to Raney's comments by adding further project-specific information to the modeling. Nevertheless, considering the amount of material other than woody debris and building area to be moved, Raney requests justification showing that two additional haul trips would be adequate to remove the approximately 19,727 square feet of asphalt, concrete, gravel and rock indicated on the Demolition & Tree Removal Plan.

It should be noted that although Ambient Consulting manually altered the number of haul trips, CalEEMod allows the user to input the amount of material off-hauled during site preparation or grading, and will automatically generate the estimated number of haul trips from material removal. Therefore, to ensure that construction emissions were fully captured by emissions modeling, Ambient Consulting should provide supporting justification stating how the methodology currently being used adequately captures potential emissions from removal of all on-site material, including existing buildings, vegetation, asphalt, gravel and rock. Alternatively, Ambient Consulting may update project modeling to reflect the full amount of material off-haul during project-related construction activity, as shown in the Demolition & Tree Removal Plans prepared for the proposed project.



Please feel free to contact me by email at rods@raneymanagement.com or by phone at (916) 372-6100 with any questions or comments you may have related to the above analysis.

Sincerely,

Rod Stinson Division Manager/Air Quality Specialist



Sacramento, CA 95834 Office: (916) 372-6100 Fax: (916) 419-6108

www.raneymanagement.com

# **Attachment J**

"Noise & Groundborne Vibration Impact Assessment" by Ambient Air Quality & Noise Consulting



612 12<sup>th</sup> Street, Suite 201 Paso Robles, CA 93446 805.226.2727 www.Ambient.Consulting

1 | Page

#### **TECHNICAL MEMORANDUM**

Date: September 21, 2018

To: Bill Jordan

billjordan@sbcglobal.net

**From:** Kurt Legleiter, Principal

Subject: Noise & Groundborne Vibration Impact Assessment for the Proposed Clayton Senior Housing

Project, Clayton, CA

#### PROJECT SUMMARY

The proposed project includes development of an approximate 81-unit senior housing complex. The project is generally located at the northwestern corner of High Street and Marsh Creek Road, within Clayton, California. The proposed project site plan is depicted in Figure 1 located at the end of this report.

#### **APPLICABLE CRITERIA**

The City of Clayton addresses noise in the City's General Plan Noise Element and in the City's Municipal Code. In accordance with the City of Clayton General Plan Noise Element, new noise-sensitive land uses, such as residential uses, are considered acceptable in areas where the exterior average-daily noise level is 60 dBA L<sub>dn</sub>, or less. Interior noise levels for residential land uses are limited to 45 dBA L<sub>dn</sub>, or less.<sup>1</sup> Section 15.01.101 of the City's Municipal Code generally limits construction activities to between the hours of 7:00 a.m. and 5:00 p.m., Monday through Friday.

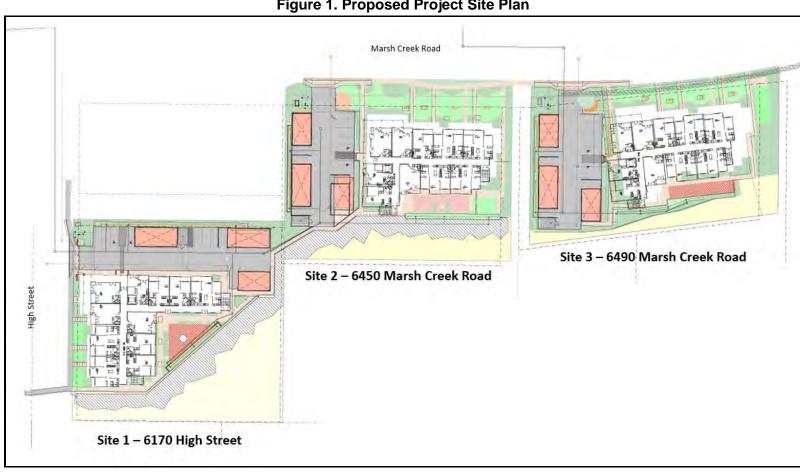
#### **EXISTING NOISE ENVIRONMENT**

Ambient noise levels within the project area are predominantly influenced by vehicle traffic on area roadways. To document existing ambient noise levels in the project area, short-term ambient noise measurements were conducted on August 22, 2018 using a Larson Davis Laboratories, Type I, Model 820 integrating sound-level meter. The meter was calibrated before use and is certified to be in compliance with ANSI specifications. Measured ambient daytime noise levels are summarized in Table 2. As shown, the measured daytime ambient noise level near the eastern boundary of the project site, along Marsh Creek Road, was approximately 64.7 dBA Leq.

-

City of Clayton. Clayton General Plan. Section VIII. Noise Element. Available at website url: https://ci.clayton.ca.us/fc/community-development/planning/long-range-planning/general-plan/section-VIII-noise-element.pdf.







**Table 1. Summary of Measured Ambient Noise Levels** 

Location	Manitarina Dariad	Noise Levels (dBA)			
Location	Monitoring Period	Leq	L <sub>max</sub>		
Eastern Site Boundary. Approximately 35 feet from Marsh Creek Road centerline.	17:10 – 17:20	64.7	78.9		
Clayton Road, West of Marsh Creek Road. Approximately 50 feet from Clayton Road centerline.	17:35 – 17:45	68.2	76.3		

Ambient noise measurements were conducted on August 22, 2018 using a Larson Davis Laboratories, Type I, Model 820 integrating sound-level meter.

Predicted existing traffic noise levels for nearby segments of Marsh Creek Road, Main Street, and Clayton Road were calculated using the FHWA RD77-108 computer model. Average-daily traffic (ADT) volumes used in the modeling were calculated based on peak-hour volumes derived from the *Clayton Community Church Project EIR* (2011) and assuming that peak-hour volumes represent approximately ten percent of the ADT volumes. Calculated ADT volumes included estimated vehicle trips identified for the Clayton Community Church project. Predicted existing traffic noise levels are summarized in Table 2.

Table 2. Predicted Existing Traffic Noise Levels

	Average-Daily	Traffic Noise Level at 50 feet from the Near-Travel- Lane Centerline (dBA	Roadw	Distance (feet) fro Roadway Centerlin Noise Contours		
	Average-Daily	Lanc contenine (abA				
Roadway Segment	Traffic Volume <sup>1</sup>	CNEL/L <sub>dn</sub> )	65	60	55	
Marsh Creek Rd., South of Main Street. <sup>1</sup>	6,660	61.4	WRR	83	175	
Clayton Rd., West of Marsh Creek Rd.	19,040	66.5	98	204	436	
Main St., West of Marsh Creek Rd.	2,310	54.4	WRR	WRR	51	
1						

<sup>1.</sup> Based on peak-hour traffic volumes derived from the Clayton Church DEIR. Assumes peak-hour volumes are approximately ten percent of average-daily volumes.

WRR-Within Roadway Right-of-Way.

Source: City of Clayton. 2011. Clayton Community Church Project EIR.

As depicted in Table 2, existing traffic noise levels for Marsh Creek Road, south of Main Street, are estimated to be approximately 61.4 dBA L<sub>dn</sub> at 50 feet from the near-travel-lane centerline. Existing traffic noise levels for Clayton Road and Main Street, west of Marsh Creek Road, are estimated to be approximately 66.5 and 54.4 dBA L<sub>dn</sub> at 50 feet from the near-travel-lane centerline, respectively. The projected existing 60 dBA L<sub>dn</sub> noise contours for Clayton Road and Marsh Creek Road would extend to approximately 204 and 83 feet from the roadway centerline, respectively. Existing 60 dBA L<sub>dn</sub> noise contours for Main Street are not predicted to extend beyond the roadway right-of-way. Other nearby streets in the project area are not anticipated to have sufficient traffic volumes that would influence on-site noise conditions.

On-site noise levels would be primarily influenced by vehicle traffic on Marsh Creek Road. Based on the predicted existing traffic noise levels identified in Table 2, existing on-site noise levels are estimated to range from less than 55 dBA L<sub>dn</sub> near the western site boundary to approximately 65 dBA L<sub>dn</sub> near the eastern site boundary. It is important to note that these predicted noise levels do not take into account shielding from intervening structures or terrain. Predicted traffic noise contours for Marsh Creek Road are depicted in Figure 2.



**2** | Page

AMBIENT



Image Source: Contra Costa County. 2018. CCMAP. https://gis.cccounty.us/Html5//index.html?viewer=CCMAP.



612 12<sup>th</sup> Street, Suite 201 Paso Robles, CA 93446 805.226.2727 www.Ambient.Consulting

3 | Page

# **IMPACT ANALYSIS**

## **Thresholds of Significance**

Noise and groundborne vibration impacts associated with the proposed project were evaluated in accordance with Appendix G of the California Environmental Quality Act (CEQA) Guidelines. Accordingly, the proposed project would be considered to have a potentially significant impact if the project would:

- 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?
- B. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?
- C. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?
- D. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?
- E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?, or

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

## **Impact Discussion**

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?

In accordance with the City of Clayton General Plan, new noise-sensitive land uses, including residential uses, are considered acceptable in areas where the exterior average-daily noise level is 60 dBA L<sub>dn</sub>, or less. Interior noise levels for residential land uses are limited to 45 dBA L<sub>dn</sub>, or less.<sup>2</sup>

The compatibility of the proposed land uses was evaluated based on predicted future year 2035 on-site noise conditions. Predicted future traffic noise levels for nearby segments of Clayton Road, Main Street, and Marsh Creek Road were calculated using the FHWA RD77-108 computer model based on peak-hour volumes derived from the *Clayton Community Church Project EIR* (2011) and are summarized in Table 3. As shown, predicted future traffic noise levels for Marsh Creek Road, south of Main Street, are estimated to be approximately 61.6 dBA L<sub>dn</sub> at 50 feet from the near-travel-lane centerline. Predicted future year 2035 traffic noise levels for Clayton Road and Main Street, west of Marsh Creek Road, are estimated to be approximately 66.6 and 54.9 dBA L<sub>dn</sub>, respectively, at 50 feet from the near-travel-lane centerline. The projected future 60 dBA L<sub>dn</sub> noise contours for Marsh Creek Road and Clayton Road would extend to approximately 86 and 206 feet from the roadway centerline, respectively. The Projected future 60 dBA L<sub>dn</sub> noise contour for Main Street, west of Marsh Creek Road, would not extend beyond the roadway right-of-way. Other nearby streets in the project area are not anticipated to have sufficient traffic volumes that would influence on-site noise conditions.

-

<sup>&</sup>lt;sup>2</sup> City of Clayton. *Clayton General Plan. Section VIII. Noise Element*. Available at website url: https://ci.clayton.ca.us/fc/community-development/planning/long-range-planning/general-plan/section-VIII-noise-element.pdf.

4 | Page

Table 3. Predicted Future Year 2035 Traffic Noise Levels & Contours

	Average-Daily	Traffic Noise Level at 50 feet from the Near-Travel- Lane Centerline	Roadw	nce (feet) ay Center se Conto	Tine to
Roadway Segment	Traffic Volume <sup>1</sup>	(dBA CNEL/L <sub>dn</sub> )	65	60	55
Marsh Creek Rd., South of Main Street. <sup>1</sup>	6,946	61.6	WRR	86	181
Clayton Rd., West of Marsh Creek Rd.	19,196	66.6	99	206	440
Main St., West of Marsh Creek Rd.	2,310	54.9	WRR	WRR	55

Based on peak-hour traffic volumes derived from the Clayton Church DEIR. Assumes peak-hour volumes are approximately ten percent of average-daily volumes.

WRR=Within Roadway Right-of-Way.

Source: City of Clayton. 2011. Clayton Community Church Project EIR.

Based on the traffic noise modeling conducted, projected future year 2035 on-site noise levels would be primarily influenced by vehicle traffic on Marsh Creek Road. Predicted exterior and interior traffic noise levels at proposed structures located nearest Marsh Creek Road are summarized in Table 4. As depicted, proposed structures located on Site 1 would not be located within the projected future year 2035 60 dBA L<sub>dn</sub> noise contour of Marsh Creek Road. However, structures located on the proposed sites 2 and 3 would be located within the projected future year 2035 60 dBA L<sub>dn</sub> noise contour of Marsh Creek Road. Predicted exterior noise levels at the nearest building façades of Site 2 and the Site 3 would be approximately 61 and 62 dBA L<sub>dn</sub>, respectively. Predicted exterior noise levels would exceed the City's General Plan exterior noise standard of 60 dBA L<sub>dn</sub>. However, based on these exterior noise levels and assuming an average exterior-to-interior noise reduction of 25 dB, which is typical for new building construction, predicted interior noise levels would be approximately 37 dBA L<sub>dn</sub>, or less, and would not exceed the City's General Plan interior noise standard of 45 dBA L<sub>dn</sub>. It is also important to note that no outdoor activity areas would be located within the projected future year 2035 60 dBA L<sub>dn</sub> noise contour of Marsh Creek Road. This impact is considered less than significant. No mitigation is required.

Table 4. Predicted Future Year 2035 Traffic Noise Levels at Nearest Proposed Structure

Lot	Distance to Nearest Proposed Structure (feet) <sup>1</sup>	Predicted Exterior/Interior Noise Level (dBA CNEL/Ldn)	Exceeds City's Exterior/Interior Noise Standard (60/45 dBA L <sub>dn</sub> )?						
Site 1 – 6170 High St.	236	53/28	No/No						
Site 2 – 6450 Marsh Creek Rd.	71	61/36	Yes/No						
Site 3 – 6490 Marsh Creek Rd.	60	62/37	Yes/No						
1. Based of distance from the centerlii	1. Based of distance from the centerline of Marsh Creek Road to the façade of the nearest proposed occupied structure.								



**5** | Page

Figure 3. Predicted Future Year 2035 Traffic Noise Contours

AMBIENT



 ${\it Image Source: Contra\ Costa\ County.\ 2018.\ CCMAP.\ https://gis.cccounty.us/Html5//index.html?viewer=CCMAP.}$ 





\_\_\_\_

# B. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Long-term operational activities associated with the proposed project would not involve the use of any equipment or processes that would result in potentially significant levels of ground vibration. Increases in groundborne vibration levels attributable to the proposed project would be primarily associated with short-term demolition and construction activities. Demolition and construction activities associated with the proposed improvements would require the use of various off-road equipment, such as tractors, concrete mixers, and haul trucks. The use of major vibration-generating equipment, such as pile drivers, would not be required for this project.

Groundborne vibration levels associated with representative demolition and construction equipment are summarized in Table 5. As depicted, ground vibration levels generated by off-road equipment and haul trucks would be approximately 0.089 in/sec ppv at 25 feet. Predicted vibration levels at the nearest offsite structures would not exceed commonly applied criteria for structural damage and human annoyance (0.5 and 0.2 in/sec ppv, respectively<sup>3</sup>). As a result, this impact would be considered less than significant. No mitigation is required.

**Table 5. Typical Construction Equipment Vibration Levels** 

Equipment	Peak Particle Velocity at 25 Feet (Inches/second, ppv)
Large tractors	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozers/Tractors	0.003

Source: California Department of Transportation. September 2013. Transportation and Construction Vibration Guidance Manual.

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

Long-term operational activities associated with the proposed project would not be anticipated to involve the use of any equipment or processes that would result in potentially significant increases in ambient noise levels. Long-term, permanent increases in ambient noise levels would be primarily associated with potential increases in vehicle traffic on nearby roadways. In addition, the development of the proposed on-site uses may also result in increased noise levels associated with on-site vehicle parking areas and facility maintenance activities. Noise levels commonly associated with these sources are discussed separately, as follows:

\_

<sup>&</sup>lt;sup>3</sup> California Department of Transportation. 2013. *Transportation and Construction Vibration Guidance Manual*.



612 12<sup>th</sup> Street, Suite 201 Paso Robles, CA 93446 805.226.2727 www.Ambient.Consulting

**7** | Page

### Vehicular Traffic

Predicted increases in traffic noise levels for primarily affected roadways, which are anticipated to include Marsh Creek Road and Clayton Road, are summarized in Table 6. Predicted increases in traffic noise levels assumes that all project-generated vehicle traffic (i.e., 279 trips/day) would be distributed along these two roadways. As shown, the proposed project would not result in a significant increase in traffic noise levels along these primarily affected roadways.

**Table 6. Predicted Increases in Traffic Noise Levels** 

	Average-Daily Traffic Noise Level at 50 feet for Traffic Volume <sup>1</sup> Travel-Lane Centerline (dBA				CNEL/L <sub>dn</sub> )		
	Without	With	Without	With		Significant	
Roadway Segment	Project	Project <sup>2</sup>	Project	Project	Increase	Increase? <sup>3</sup>	
<b>Existing Conditions</b>							
Marsh Creek Rd., South of Main Street. <sup>1</sup>	6,660	6,939	61.4	61.5	0.1	No	
Clayton Rd., West of Marsh Creek Rd.	19,040	19,319	66.5	66.6	0.1	No	
Clayton Rd., East of Marsh Creek Rd.	13,180	13,459	64.9	65.0	0.1	No	
Future Year 2035 Conditions							
Marsh Creek Rd., South of Main Street. <sup>1</sup>	6,790	7,069	61.5	61.6	0.1	No	
Clayton Rd., West of Marsh Creek Rd.	19,170	19,449	66.6	66.6	0.1	No	
Clayton Rd., East of Marsh Creek Rd.	13,180	13,459	64.9	65.0	0.1	No	

<sup>1.</sup> Based on peak-hour traffic volumes derived from the Clayton Church DEIR (2011). Assumes peak-hour volumes are approximately ten percent of average-daily volumes.

For most projects involving predominantly light-duty vehicles, such as the proposed project, a doubling of vehicle traffic would be required before a noticeable increase (i.e., 3 dBA, or greater) in traffic noise levels would occur. Implementation of the proposed project would not be anticipated to result in a doubling of vehicle traffic along other less-affected area roadways. For these reasons, the proposed project is not projected to result in a significant increase in traffic noise levels. This impact would be considered less than significant. No mitigation is required.

### On-site Vehicle Parking Areas

The proposed project would include approximately 20 parking spaces on Site 1, 23 parking spaces on Site 2, and 24 parking spaces on Site 3. Noise levels commonly associated with parking lots are generated by the starting of vehicles, the opening and closing of vehicle doors, playing of amplified music, and the occasional sound of vehicle alarms and horns. Intermittent noise levels associated with such noise events can generate sound levels of up to approximately 92 dBA at 50 feet.

Noise levels associated with on-site vehicle parking areas were quantified using the Federal Transit Administration's *Noise Impact Assessment Spreadsheet* (2007). Noise levels were quantified assuming a maximum of 24 parking spaces and that all spaces would be accessed within a one-hour period. Based on these assumptions, the highest daytime average-hourly noise levels associated with on-site parking lot activities would be approximately 28 dBA L<sub>eq</sub>

<sup>2.</sup> Conservatively assumes that all project-generated trips (i.e., 156 trips/day) would be distributed along the roadway segments evaluated.

<sup>3.</sup> Significant increase is defined as a increase of 3 dBA, or greater.

WRR=Within Roadway Right-of-Way.



612 12<sup>th</sup> Street, Suite 201 Paso Robles, CA 93446 805.226.2727 www.Ambient.Consulting

8 | Page

at approximately 25 feet. On-site vehicle parking activities would not result in a significant increase in ambient noise levels. This impact would be considered less than significant. No mitigation is required.

#### **Facility Maintenance**

Exterior noise events associated with the maintenance of the proposed land use would be primarily associated with the operation of landscape maintenance equipment, as well as, occasional waste-collection activities. Based on measurements conducted at similar facilities, landscape maintenance equipment, such as leaf blowers and gasoline-powered lawn mowers; as well as waste-collection activities can result in intermittent noise levels of up to approximately 100 dBA at 3 feet. Resultant exterior noise levels could reach intermittent levels of approximately 75 dBA L<sub>max</sub> at 50 feet. Facility maintenance activities performed during these more noise-sensitive nighttime hours could result in increased annoyance and potential sleep disruption for occupants of nearby residential dwellings.

The City of Clayton's Municipal Code (Chapter 9.30, Noise) restricts noise-generating activities, such as landscape maintenance, to between the daytime hours of 7:00 a.m. and 8:00 p.m. on weekdays, and between 8:00 a.m. and 8:00 p.m. on weekends. Waste-collection activities are restricted to between the daytime hours of 6:00 a.m. and 10:00 p.m. on weekdays, and between 8:00 a.m. and 10:00 p.m. on weekends. Noise-generating activities associated with facility maintenance would not occur during the more noise-sensitive nighttime hours. As a result, this impact would be considered less than significant. No mitigation is required.

# D. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Temporary increases in noise would be primarily associated with demolition and construction activities. Demolition and construction noise typically occurs intermittently and varies depending upon the nature or phase (e.g., demolition/land clearing, grading and excavation, building construction) of the activity. Noise generated by demolition and construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. As noted in Table 7, instantaneous noise levels generated by individual pieces of off-road equipment typically range from approximately 70 dBA to 85 dBA L<sub>max</sub> at 50 feet. Typical operating cycles may involve 2 minutes of full power, followed by 3 or 4 minutes at lower settings. Based on typical off-road equipment usage rates, average-hourly noise levels typically range from approximately 82 dBA L<sub>eq</sub>, or less, at 50 feet.

When noise levels generated by demolition and construction activities are being evaluated, activities occurring during the more noise-sensitive evening and nighttime hours are of increased concern. Because exterior ambient noise levels typically decrease during the late evening and nighttime hours as community activities (e.g., vehicle traffic) decrease, construction activities performed during these more noise-sensitive periods of the day can result in increased annoyance and potential sleep disruption for occupants of nearby residential dwellings.

Section 15.01.101 of the City's Municipal Code generally limits construction activities to between the hours of 7:00 a.m. and 5:00 p.m., Monday through Friday. Noise-generating construction activities would not occur during the more noise-sensitive nighttime hours. As a result, this impact would be considered less than significant. No mitigation is required.



**Table 7. Typical Construction Equipment Noise Levels** 

Table 7. Typical Constitution Equipment Noise Levels							
Equipment		e Level (dBA) rom Source					
	L <sub>max</sub>	Leq					
Air Compressor	80	76					
Backhoe/Front-End Loader	80	76					
Compactor	80	73					
Concrete Mixer Truck	85	81					
Concrete Vibratory Mixer	80	73					
Crane, Mobile	85	77					
Dozer	85	81					
Excavator	85	81					
Generator	82	79					
Generator (<25 kVA)	70	67					
Grader	85	81					
Jack Hammer	85	78					
Paver	85	82					
Pneumatic Tools	85	82					
Roller	85	78					
Sources: Federal Transit Administration. May 2006.	Sources: Federal Transit Administration. May 2006. Transit Noise and Vibration Impact Assessment.						

The nearest public-use airport is Buchanan Field Airport located approximately seven miles to the northwest. No private airstrips have been identified within two miles of the project site. The proposed project site is not located within two miles of a public-use airport or within the projected noise contours or planning area of a public-use airport or private airstrip. As a result, the proposed project would have no impact with regard to airport noise.

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

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



612 12<sup>th</sup> Street, Suite 201 Paso Robles, CA 93446 805.226.2727 www.Ambient.Consulting

**10** | Page

# **Traffic Noise Prediction**

(FHWA RD77-108)

										Distance (ft) to CNEL/Ldn Contou		n Contours
		Number of	Median	Speed					CNEL/Ldn at 50			
Scenario	Roadway Name/Segment	Lanes	Width (ft)	(mph)	ADT	%HDV	%MDV	%LDV	ft from NTLCL	65	60	55
Existing NP	Clayton Rd., West of Marsh Creek Rd.	4	12	40	19,040	0.7	1.8	97.5	66.5	98	204	436
Existing NP	Clayton Rd., East of Marsh Creek Rd.	4	12	40	13,180	0.7	1.8	97.5	64.9	79	161	342
Existing NP	Main St., West of Marsh Creek Rd.	2	0	25	2,310	0.7	1.8	97.5	54.4	0	0	51
Existing NP	Marsh Creek Rd., South of Main Street.1	2	12	35	6,660	0.7	1.8	97.5	61.4	0	83	175
Year 2035 NP	Clayton Rd., Oak Street to Marsh Creek Rd.	4	12	40	19,170	0.7	1.8	97.5	66.6	99	206	440
Year 2036 NP	Clayton Rd., East of Marsh Creek Rd.	4	12	40	13,180	0.7	1.8	97.5	65	80	163	346
Year 2037 NP	Main St., West of Marsh Creek Rd.	2	0	25	1,710	0.7	1.8	97.5	54.9	0	0	55
Year 2038 NP	Marsh Creek Rd., South of Main Street.1	2	12	35	6,790	0.7	1.8	97.5	61.5	0	86	181
Existing PP	Clayton Rd., West of Marsh Creek Rd.	4	12	40	19,319	0.7	1.8	97.5	66.6	99	206	440
Existing PP	Clayton Rd., East of Marsh Creek Rd.	4	12	40	13,459	0.7	1.8	97.5	65	80	163	346
Existing PP	Marsh Creek Rd., South of Main Street.1	2	12	35	6,939	0.7	1.8	97.5	61.5	0	85	180
Year 2035 PP	Clayton Rd., Oak Street to Marsh Creek Rd.	4	12	40	19,449	0.7	1.8	97.5	66.6	100	207	442
Year 2036 PP	Clayton Rd., East of Marsh Creek Rd.	4	12	40	13,459	0.7	1.8	97.5	65	80	163	346
Year 2038 PP	Marsh Creek Rd., South of Main Street.1	2	12	35	7,069	0.7	1.8	97.5	61.6	0	86	182

Model Calibration	Meas.	Modeled	Delta	Acceptable?	K-Factor Applied?
Clayton Rd., West of Marsh Creek Rd.	68.2	69.2	1.0	Yes	No
Marsh Creek Rd., South of Clayton Rd.	64.7	65.6	0.9	Yes	No

# **Attachment K**

Peer review of Noise Study by J.C. Brennan & Associates



August 10, 2018

Mr. Nick Pappani Raney Planning & Management 1501 Sports Drive Sacramento, CA 95834

Subject: Peer Review of the Noise Study for the Clayton Senior Housing Apartments (6170 High Street - Clayton, California)

Dear Mr. Pappani:

j.c. brennan & associates, Inc. has completed our peer review of the above-referenced documents produced by Thornburn Associates. The Noise Study was submitted on April 20, 2018 (Clayton Apartments - Noise Study: 6450 Marsh Creek Rd., Clayton, TA Project #18028.00, Prepared by Thornburn Associates - Earl Mullins, PE, Prepared for William Jordan). The intent of the review was to determine if the documents met the technical requirements for evaluating potential noise impacts and determining if the analyses met the requirements of CEQA and the City of Clayton.

Specifically, we reviewed the report for accuracy and thoroughness with special attention to the following areas:

- Applicable noise level standards;
- Methodology:
- Assessment of noise impacts;
- Compliance with CEQA requirements and the City of Clayton noise requirements.

# **Clayton Senior Housing Review**

The Noise Study focused on traffic noise associated with Marsh Creek Road, and construction noise levels.

- 1. Generally, a noise study for this type of project will be formatted as follows;
  - Introduction;
  - Project Description;
  - Applicable Criteria;
  - Background or Ambient Noise Levels (Existing Traffic Noise);
  - Analysis of Future Traffic Noise Levels;
  - Analysis of Construction Noise Levels;
  - Compliance with Applicable Criteria;
  - Recommendations, if required (Conclusions).

- 2. The analysis accurately describes the proposed project, and the surrounding land uses.
- 3. The analysis combines the applicable criteria with the existing noise environment. This should be separated and clearly state the General Plan Noise Element criteria and the ordinance criteria. The applicable criteria are in the analysis, but are not necessarily together under one heading.
- 4. The City may want the analysis to include any applicable CEQA noise level criteria.
- 5. Determination of existing traffic noise levels were based upon a continuous 24-hour noise level measurement conducted at a distance of approximately 100-feet from the Marsh Creek Road centerline, by Thornburn, on February 20-21, 2018. The results of the 24-hour measurements indicated an Ldn of 55 dBA. This is less than the applicable exterior noise level standard of 60 dB Ldn. Generally, if a 24-hour measurement is conducted to determine the existing traffic noise levels, it would be conducted at the project site nearest the proposed project buildings. Since the nearest building is approximately 70-feet from the Marsh Creek Road centerline, the predicted traffic noise level, based upon the 24-hour measurements would be closer to 57 dBA 58 dBA Ldn. There is a good chance that the existing 24-hour noise measurement could have been influenced by shielding from existing buildings to the north and south.
- 6. When predicting traffic noise levels, standard procedures would employ traffic noise prediction models such as the FHWA RD77-108 traffic noise prediction model.
- 7. j.c. brennan & associates, Inc. was able to locate traffic counts and an existing "typical weekday" traffic volume on Marsh Creek Road at the project site. These were contained in the Creekside Terrace Mitigated Negative Declaration. They were somewhat outdated, but can be used for an analysis, for the lack of other data. A typical weekday traffic volume was 5,500 vehicles per day.
- 8. j.c. brennan & associates, Inc. utilized the FHWA RD77-108 traffic noise prediction model to determine the Ldn at the nearest building facades, using the ADT of 5,500. The results indicate that the level would be 62 dBA Ldn at the nearest building facades. Using the Noise Study recommendation of future traffic increasing by 50%, and using that volume (8,250 ADT), the predicted future traffic noise level would be 63 dB Ldn at the nearest building facades. Appendix B provides the inputs to the FHWA model.
- 9. The Noise Study accurately describes the potential for the project to comply with the interior noise level standard of 45 dB Ldn. Even if the project is exposed to levels of up to 65 dBA Ldn, typical construction will provide an exterior to interior noise level reduction of 20 dBA to 25 dBA.
- 10. Based upon the Noise Study, we agree that the project will not present a significant increase in traffic noise levels on the local street system.
- 11. The Noise Study accurately describes noise levels associated with construction activities.

# Recommendations

It is recommended that the City requires the Noise Report to be updated with one of the two following methodologies:

- 1. Utilize a standard traffic noise prediction model, such as the FHWA RD77-108, to determine existing and future traffic noise levels at the project site;
- 2. Conduct additional 24-hour noise level measurements at a site representative of the nearest proposed building facade, or a site which may not be influenced by shielding from existing buildings to the north and south. The analysis can predict future traffic noise based upon the methodology previously used.

This concludes our peer review. If you have questions, please contact me at 530-823-0960, or jbrennan@jcbrennanassoc.com.

Respectfully submitted,

j.c. brennan & associates, Inc.

Jim Brennan President

Member: Institute of Noise Control Engineering

File: 2018-141 - Clayton Senior Housing Peer Review - August 2018

Appendix A

**Acoustical Terminology** 

**Acoustics** The science of sound.

Ambient Noise The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that

location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the

setting in an environmental noise study.

**Attenuation** The reduction of an acoustic signal.

**A-Weighting** A frequency-response adjustment of a sound level meter that conditions the output signal to approximate

human response.

**Decibel or dB** Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over

the reference pressure squared. A Decibel is one-tenth of a Bell.

CNEL Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during

evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to

averaging.

Frequency The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).

L<sub>dn</sub> Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.

L<sub>eq</sub> Equivalent or energy-averaged sound level.

L<sub>max</sub> The highest root-mean-square (RMS) sound level measured over a given period of time.

L<sub>(n)</sub> The sound level exceeded a described percentile over a measurement period. For instance, an hourly L<sub>50</sub> is

the sound level exceeded 50% of the time during the one hour period.

**Loudness** A subjective term for the sensation of the magnitude of sound.

Noise Unwanted sound.

NRC Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the

arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect

absorption.

**Peak Noise** The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This

term is often confused with the AMaximum@ level, which is the highest RMS level.

RT<sub>60</sub> The time it takes reverberant sound to decay by 60 dB once the source has been removed.

Sabin The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption

of 1 Sabin.

**SEL** Sound Exposure Level. SEL is s rating, in decibels, of a discrete event, such as an aircraft flyover or train

passby, that compresses the total sound energy into a one-second event.

STC Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound.

It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations.

Threshold The lowest so of Hearing persons with

The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for

persons with perfect hearing.

Threshold of Pain

Approximately 120 dB above the threshold of hearing.

Impulsive Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.

**Simple Tone** Any sound which can be judged as audible as a single pitch or set of single pitches.

j.c. brennan & associates consultants in acoustics

# Appendix C

# FHWA-RD-77-108 Highway Traffic Noise Prediction Model

# **Data Input Sheet**

Project #: 2018-141

Description: Clayton Senior Housing Ldn/CNEL: Ldn

Hard/Soft: Soft

Segment	Roadway Name	Lot Numbers	ADT	Day %	Eve %	Night %		% Hvy. Trucks	Speed	Distance	Offset (dB)
1	Marsh Creek Rod	Existing	5,500	85		15	1	0.2	45	71	
2	Marsh Creek Rod	Future 1.5 factor	8,250	85		15	1	0.2	45	71	
3	Marsh Creek Rod	Existing Location of monitor	5,500	85		15	1	0.2	45	102	
4											
5											
6											
7											
8											
9											
10											
11											
12 13											
13											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24				Ш							
25				ij.c	bi	enn Vcon	an 8	X as	SSOC n aco	iates oustics	

# Appendix C

# FHWA-RD-77-108 Highway Traffic Noise Prediction Model Predicted Levels

Project #: 2018-141

Description: Clayton Senior Housing

Ldn/CNEL: Ldn Hard/Soft: Soft

				ivieaium	Heavy	
Segment	Roadway Name	Lot Numbers	Autos	Trucks	Trucks	Total
1	Marsh Creek Rod	Existing	61.2	49.5	47.0	62
2	Marsh Creek Rod	Future 1.5 factor	63.0	51.3	48.8	63
3	Marsh Creek Rod	Existing Location of monitor	58.8	47.1	44.6	59



# Appendix C

# FHWA-RD-77-108 Highway Traffic Noise Prediction Model Noise Contour Output

Project #: 2018-141

Description: Clayton Senior Housing

Ldn/CNEL: Ldn Hard/Soft: Soft

			L	distances to	) i rattic ivoi	se Contours	3
Segment	Roadway Name	Lot Numbers	75	70	65	60	55
1	Marsh Creek Rod	Existing	9	20	42	91	196
2	Marsh Creek Rod	Future 1.5 factor	12	26	55	120	257
3	Marsh Creek Rod	Existing Location of monitor	9	20	42	91	196



# **Attachment L**

"Trip Generation Study" by Kimley-Horn



May 8, 2017

Mr. Bill Jordan P.O. Box 547 Clayton, CA 94517

RE:

Clayton Senior Housing Trip Generation Study

Final Letter

Dear Mr. Jordan:

An 84-unit senior housing development is being proposed in Clayton, CA. The Client would like to determine if a traffic study is necessary for this project, given the size of the development. Previously, Kimley-Horn conducted a similar trip generation study for what was then a 57-unit condominium project. Now, Kimley-Horn conducted a trip generation study for this senior housing use to aid the Client with their application for the project. The following discusses the methodology, analysis, and results of the trip generation.

## BACKGROUND

It is proposed that an 84-unit senior housing project be constructed in Clayton, CA. The project would include three lots of units. The northern-most lot is 24 units with access on High Street, the middle lot is 32 units with access on Marsh Creek Road, and the southern-most lot is 28 units with access on Marsh Creek Road. There is a private access road between the middle lot and the southern-most lot, thereby bisecting the two lots. Previously, the City of Clayton (City) has requested that a traffic study be completed, analyzing the intersection of Marsh Creek Road/Clayton Road. The Client is requesting that an independent consulting firm provide as needed transportation and traffic engineering services related to the proposed project.

### TRIP GENERATION

Trip generation is typically estimated by using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9<sup>th</sup> Edition<sup>1</sup>. This is the standard reference in the industry for determining trip generation for potential projects. The land use that bests represents the proposed senior housing development is the senior adult housing-attached (Land Use 252). For Land Use 252, an average rate and a fitted curve equation are provided for the sample data. ITE methodology dictates that the fitted curve equation should be used if there are 20 or more data points, or if the R<sup>2</sup> value is greater than 0.75 (the R<sup>2</sup> value shows how close the data is to the fitted curve, with 1.0 being the best fit, and 0.0 showing no fit) and the weighted standard deviation for the weighted average rate is greater than

<sup>&</sup>lt;sup>1</sup> Trip Generation Manual, 9th Edition, Institute of Transportation Engineers, Washington, D.C., 2012.



or equal to 55 percent of the weighted average rate. **Table 1** shows the trip generation information for Land Use 252.

Table 1 – Trip Generation for Senior Adult Housing-Attached (Land Use 252)

Land Use	ITE Land Use Code	Variable	Time Period	# of Data Points	Average Rate	Standard Deviation	Fitted Curve Equation	R <sup>2</sup>
Senior Adult Housing- Attached	252	Occupied Dwelling Units	Weekday Daily	5	3.44	3.11	T = 2.98(X) + 21.05	0.81
			Weekday AM Peak	9	0.19	0.69	T = 0.20(X) - 1.66	0.98
			Weekday PM Peak	9	0.52	0.23	T = 0.24(X) - 2.11	0.98

For each of the time periods, the following criteria for a fitted curve equation is **not** met:

Number of data points does <u>not</u> exceed 20

Since there are not enough data points to use the fitted curve equation, the average rate is recommended for trip generation purposes. **Table 2** shows the expected vehicle trips for the proposed project using the average rate.

Table 2 – Project Trips

	Land Use	# of Units	Variable	Method	Daily Trips	AM Peak Hour	PM Peak Hour
ı	Senior Adult		Occupied				
- 2	Housing-	84	Dwelling	Average Rate	290	16	19
	Attached		Units				

Other trip generation considerations were reviewed. Internal capture reductions, which account for the interaction among different uses in a multi-use development, were determined to not be relevant for this project development because the project is a single use. Pass-by trip reductions, which account for trips already on the roadway network and stop as they pass the project site along to another destination, were determined to not be relevant for this project because the senior adult housing-attached use is classified as a primary source and destination for vehicle trips.

With no trip reductions applied to the trip generation, the project is anticipated to generate 290 daily trips, 16 AM peak hour trips, and 19 PM peak hour trips.

## TRAFFIC STUDY REQUIREMENTS

Traffic study requirements within the City of Clayton are typically governed by the Contra Costa Transportation Authority (CCTA). The City of Clayton's General Plan was reviewed and there were no requirements established for a traffic study nor were there any City Traffic Impact Analysis



Guidelines to refer to. Accordingly, CCTA standards were most applicable and therefore used in this analysis. The *CCTA Technical Procedures*<sup>2</sup> is a document that provides a uniform approach and methodology for public agencies within Contra Costa County to evaluate land use impacts. The *CCTA Technical Procedures* provides guidance on when a traffic impact study should be completed, which intersections should be included, which scenarios should be analyzed, and other evaluations for a traffic study. These guidelines were used to determine if a traffic impact analysis was necessary for this specific project. The guidelines dictate that a traffic impact analysis should be conducted for projects that exceed 100 net new peak hour vehicle trips. Since the proposed project is anticipated to generate 16 AM peak hour trips and 19 PM peak hour trips, which are both well below the 100-peak hour trip threshold, a traffic impact study is not warranted.

## INTERSECTION OF MARSH CREEK ROAD/CLAYTON ROAD

The City has requested that the intersection of Marsh Creek Road/Clayton Road be included in the traffic study. This intersection was evaluated in the *Creekside Terrace Project Initial Environmental Study/Mitigated Negative Declaration*<sup>3</sup>. The study, dated May 2010, reviewed multiple intersections within the City of Clayton, including the intersection of Clayton Road/Marsh Creek Road. The study reported the intersection of Clayton Road/Marsh Creek Road operating at LOS A in the AM and PM peak hours for the existing scenario, which meets the LOS D criteria. In addition, the study reported that the intersection operates at LOS B in the AM and PM peak hours for the Cumulative (2030) scenario, which also meets the LOS D criteria.

Given that the intersection of Clayton Road/Marsh Creek Road operates at LOS B in the AM and PM peak hours in the Cumulative (2030) scenario, it is <u>unlikely</u> that this project's 16 AM peak hour trips and 19 PM peak hour trips will worsen the level of service from LOS B to an unacceptable LOS E.

### CONCLUSIONS

The proposed 84-unit senior housing project to be constructed in Clayton, CA is anticipated to generate 16 AM peak hour trips and 19 PM peak hour trips using the ITE Trip Generation Manual. The expected AM and PM peak hour trips are well below CCTA's 100 peak hour trip threshold for warranting a traffic impact analysis and should not be required for this project. In addition, the intersection of Clayton Road/Marsh Creek Road was previously analyzed and it was reported to operate at LOS B in the Cumulative (2030) scenario for the AM and PM peak hours. This project's 16 AM peak hour trips and 19 PM peak hour trips is <u>unlikely</u> to worsen the level of service from LOS B to an unacceptable LOS E.

<sup>&</sup>lt;sup>2</sup> Contra Costa Transportation Authority Technical Procedures, CCTA, January 16, 2013.

<sup>&</sup>lt;sup>3</sup> Creekside Terrace Project Initial Environmental Study/Mitigated Negative Declaration, City of Clayton, May 2010.



Sincerely,

Ben Huie, P.E.

California Professional Engineer #C76682

# **Attachment M**

Peer review of Trip Generation Study by Abrams Associates 
 From:
 Steve Abrams

 To:
 Raquel Bedoya

 Cc:
 Nick Pappani

Subject: Re: City of Clayton Senior Housing Project
Date: Wednesday, May 9, 2018 3:04:55 PM

#### Hi Raquel,

I don't think a peer review is warranted in this case since it ended up being a simple calculation of the units times the ITE average trip rates. But there are a couple strange things here so I'll give you a free review. For some reason they elected to use the rates per "occupied dwelling units" (apparently assuming a 100% occupancy rate) instead of just using the slightly higher ITE trip rates based on the total number of units, which is what I would have done. In that case the PM peak hour trips would be slightly higher - 22 trips instead of 19 trips. Also, a lot of discussion is centered around whether or not to use the fitted curve equations for estimating the trips, but they ultimately concluded the weighted average rates should be used, which is correct in this case. Their result trip estimates are indeed accurate but I did notice there were some potential typos erros in Table 1, so you might just ask them to double check the numbers. It looks like the correct PM peak hour average rate was used in the calculations (0.23) but its listed under the standard deviation (which is 0.98) and the weighted average rate is shown as 0.52 (I'm not sure where that number comes from). But as you'll see in Table 2, the correct PM peak hour rate was used in the PM trip calculation so in general I think the memo is fine.

Thanks, Steve

# **Stephen Abrams**

PRESIDENT
Abrams Associates Traffic Engineering
1875 Olympic Boulevard, Suite 210
Walnut Creek, CA 94596
Phone: (925) 945-0201
FAX: (925) 945-7966

http://www.abramsassociates.com/

From: Raquel Bedoya

To: "Steve Abrams (steve@abramsassociates.com)"

Cc: Nick Pappani

**Sent:** Wednesday, May 9, 2018 2:32 PM **Subject:** City of Clayton Senior Housing Project

#### Hi Steve,

Nick asked me to reach out to you regarding a project in the City of Clayton. The CDD reach out to us for price estimates on managing numerous peer reviews and verifying the adequacy of the materials for a Senior Housing project. They didn't send much on traffic, but I attached the Trip Generation Study prepared by Kimley-Horn. We really just wanted to get your thoughts on doing a peer review. Nick had mentioned that we might be able to review it ourselves, but we thought we would check-in with you first to see if it was something that made sense for you to do.

Let us know what you think. Thanks so much!

Best,

Raquel Bedoya Marketing Associate Raney Planning & Management, Inc.

This email has been scanned for spam and viruses by Proofpoint Essentials. Click <u>here</u> to report this email as spam.

# Other Communication and Correspondence

February 25, 2020

VIA EMAIL

To: Council Member Jeff Wan

City of Clayton City Hall

6000 Heritage Trail

Clayton, CA 94517

Re. Common Law Conflict of Interest and Recusal

Dear Council Member Jeff Wan,

I am respectfully asking you to consider recusing yourself from any decision making involvement on my project known as The Olivia on Marsh Creek.

As provided by the constitution, I am entitled to due process with an impartial and a noninvolved reviewer in this adjudicative land use matter and quasi judicial hearing for The Olivia on Marsh Creek rental project under review again on March 3, 2020 City of Clayton Council meeting.

There is an abundant amount of information on this subject online specific to Common Law Conflict of Interest, California Fair Political Practices Commission regulations, California Municipal Law HandBook, and the California Political Reform Act. All of which may help you make an informed decision prior to March 3, 2020 city council meeting.

I believe you have expressed an abundant of concrete affirmations and actions in writing as well as in public oral testimony for your examination and consideration of such a recusal.

For context, it should be noted that the legal standard necessary for a public official to recuse himself is "an unacceptable probability of actual bias." *Nasha L.L.C. v. City of L.A.*, 125 Cal. App. 4<sup>th</sup> 470, 483 (*BreakZone Billiards v. City of Torrance*, 81 Cal. App. 4 1205, 1236-37 (2000)).

[The applicant] must establish "an unacceptable probability of actual bias on the part of those who have actual decision making power over their claims." A party seeking to show bias or prejudice on the part of an administrative decision maker is required the same "with concrete facts: "[b]ias and prejudice are never implied and must be established by clear averments."" Nasha, 124 Cal. App. 4<sup>th</sup> at 483 (quoting BreakZone Billiards, 81 Cal. App. 4<sup>th</sup> at 1236-37).

Looking at your website, you have authored several entries that relate to high density, developers and specifically to The Olivia on Marsh Creek. Hence, this documentation shows that there is not only probable bias but actual bias against having high density housing and outside developers building downtown for a myriad of reasons let alone a senior rental project that conforms to all City of Clayton ordinances and policy.

Some of your website statements are as follows:

"About Me" page

"that we shouldn't have high density housing in our downtown, and that the downtown lot should be preserved for our festivals and events, voters were presented with a clear choice in the 2018 election."

"My Key Issues" page

"No high density housing in downtown – From memory care facilities, to assisted living facilities, to high density rental units, the theme from the Council regarding development in downtown over the past several years has been consistent – developers enriching themselves at the expense of downtown, ..."

"Apparently the Council thinks that high density rental units and memory care facilities are consistent with the character of downtown. They're wrong."

Friday, January 3, 2020

"During the 12.3.19 meeting, I requested that we consider looking at the zoning of various properties around town to ensure they are more consistent with the expectations of our residents. Given we are in a RHNA surplus, we have a window of opportunity to do so without running afoul of CA's No Net Loss restrictions on available housing units. This change may evaporate if we don't act quickly."

Wednesday, January 30, 2019

"1. Since 2009 it has been a goal of the city to promote high density housing. I was opposed to this goal and proposed we modify it instead to be a goal of maintaining compliance with state requirements. As a result the goal to promote high density housing was eliminated."

Wednesday, January 16, 2019

"...Council is encouraging developers to take advantage of the CA density bonus law, allowing developers to obtain variances on things like parking, building height, and overall density. Since these units would count towards meeting the requirements for the density bonus, this requirement incents a developer to build more units because they would be able to with the density bonus."

"The council voted to adopt this ordinance at the second reading last night with a vote of 4-1. I was opposed."

Wednesday, December 5, 2018

"By campaigning on a few key issues (the idea that Clayton should not be for sale, that we shouldn't have high density housing downtown, and the downtown lot should be preserved for our festivals and events) voters were presented with a clear choice in this election. I look forward to working with the rest of the Council to bring these ideas to fruition."

Friday, November 30, 2018

"By campaigning on the idea that Clayton should not be for sale, that we shouldn't have high density housing in our downtown, and that the downtown lot should be preserved for our festivals and events, voters we're presented with a clear choice."

Wednesday, October 31, 2018

"When the subject of high density housing comes up, Mr. Shuey will often resort to deflecting responsibility to the State. He'll say things like, "every city has to designate certain parts of the city as high density." The problem with this statement is that it's false. Much like the other false statements or misleading statements that Mr. Shuey has made, this one seems to be a popular refrain in order to deflect criticism. The people of Clayton are opposed to high density housing in downtown, so when Mr. Shuey takes action that would allow it, he deceptively tries to pass the buck to the State, claiming there are mandates for high density."

"But it is wrong to say that state law requires every city to provide zoning for high density housing. That is a false statement."

"We can look at example cities in CA that do not have high density zoning."

"Some cities, including Clayton, have chosen to zone for higher densities in order to meet their affordable housing requirement, but this is not the only way to do so and when Shuey or the Pioneer make this claim they are being disingenuous. Clayton is in a different situation-we have a surplus in housing units at all levels of income. As a result, demonstrates, we don't even need to utilize high density where it is already zoned."

Tuesday, October 30, 2018

"And because the city has rezoned those parcels multiple times over the last several years, each time taking action that would lead to higher densities, it's no surprise that the owner is seeking to develop the property with as high a density that is possible."

"If we don't like the results of the rules, we need to change the rules. Rejecting plans that conform with the rules as stated is an invitation to losing a lawsuit. That's why the rules should be changed to prevent that from happening."

Monday, October 29, 2018

"once properties are zoned a certain way, high density, for parolees, or otherwise, the Planning Commission and the City have little to no ability to reject proposals that conform to and are consistent with applicable zoning."

"The best way to stop undesired projects are two fold. The first is to buy the land. That way if the city doesn't want a particular project they have quite a bit of power to control the use. The second way is to change the zoning (in compliance with the law) in such a way as to discourage undesired projects and encourage desired projects."

"The second method is relevant to is the existing three parcels near the post office. We can see how this is playing out—the city doesn't own it and there are plans on the table for three separate three story senior rental complexes. And with the density bonus law, there can be variances granted for things like height, setbacks, and parking. But since the city doesn't own it, the city cannot control what the land is used for as long as it is consistent with the zoning. And because the city has rezoned those parcels multiple times over the last several years, each time taking action that would lead to higher densities, it's no surprise that the owner is seeking to develop the property with as high a density as possible."

"Rezoning to a different use is a different avenue to make sure that whatever goes there conforms to what the rest of the city needs and wants. And since we are currently in a housing unit surplus situation, it's a viable opportunity to do so where before it that option wasn't available."

"As a result, there is no requirement for additional high density, and as the under utilization in the Southbrook project demonstrates, we don't even need to utilize high density where it is already zoned."

Friday, October 19, 2018

"When we look at the three parcels downtown near the post office, those are 119-021-013, 119-021-055, and 119-021-063."

"Combining the three parcels near the post office and the downtown open lot, that represents a total of 66 units. Without these units in our Housing Element, we would still have an RHNA surplus of 71."

"Given this surplus, why would the Council push to sell off the downtown parcel and continually rezone the three parcels near the post office?"

Wednesday, October 24, 2018

"...if they are okay with high density housing in downtown,..."

"Here are some of the key facts related to this election on Nov 6:"

"The Council has rezoned the three downtown lots near the post office multiple times, with each increasing the density required on the property"

"...the City has been interacting with outside developers"

5.

# October 16 City Council Meeting

"Clayton should not have high density 3 story housing in its downtown. If elected I would begin the process of updating the downtown specific plan to meet the changing needs of Clayton residents today."

"We can do a lot better and it's time for a change."

Friday, October 12, 2018

"Agreeing to negotiate to sell our downtown lot, trying to sell the other city owned properties, rezoning properties to allow high density housing to come in, and voting in favor of restricting people's speech, etc. are all part of his experience."

"In my professional capacity I act as a subject matter expert charged with ensuring my company..."

"It takes clear communication, and a willingness to stand up for your convictions – actual leadership."

Saturday, October 6, 2018

"And because that is absurd, then of course this three story, three separate building rental complex would also be absurd, right?"

"I would represent the view that:"

"That we shouldn't have high density housing in our downtown."

"That we shouldn't sell off our city to outside developers ensuring we lose control over how the land is used."

"We can do better, and it's time for a change."

Debate Recap of 9/24/18

"They say they must remain neutral, but then they do things like vote in favor to negotiate to sell the property and move forward with development."

"That is why the 3 story, three separate building senior rental project right near downtown is on the table. Because of previous actions of the Council to rezone those three parcels from single family residential to high density multi-family, the Council can comfortably say that the proposal for those three buildings is consistent...."

"And because those properties are privately held, and they were rezoned to be high density multifamily, the property owner gets to put giant 3 story buildings in downtown where there are no other 3 story buildings. The property owner gets to take advantage of the CA density law on us yielding variances for

things like height restrictions, setback requirements, parking requirements, etc. All because the Council was complicit in rezoning these properties, and they are privately owned."

"When I look at it like this, it's easy to see how at risk the character of our downtown actually is. It wouldn't take much to impact some of the reasons we all chose to live here."

"That future is only possible if the Council shares that vision and doesn't sell our city to outside developers."

"And that future does not include high density housing right near downtown."

Monday, August 27, 2018

"...the City Council should focus more on working to cure these obvious problems and less on creating new problems with high density housing..."

"By being part of the apparatus that was responsible for approving zoning for high density housing, creating a path for parolees to come into the city, was part of the Fulcrum debacle as well as the adventures with a megachurch, the actions of these individuals are what drove me to seek election."

Sunday, August 19, 2018

"This is a three story building, with the plans having a creation date of July 5, 2018. The plans for the three story buildings taking advantage of the CA density law bonus must have been in the works for quite some time, yet this isn't published or discussed so the community can comment."

"Why not share with the rest of the city that the proposal is for three separate three story high density senior living buildings?"

"As the plan stand now, it's 80+ units for rent. It seems the plan is ever changing, and ever titling away from what the residents of Clayton want."

"High density housing in the middle of our downtown doesn't benefit the whole of Clayton residents, and takes away from what could be a vibrant downtown commercial area."

"Regardless high density residential housing in those locations downtown is not right for Clayton. Our downtown should be utilized more for its intended purpose, and for the benefit of all the residents of Clayton."

"I envision a more family friendly commercial area that puts the character and charm of the city on the forefront."

"Responsible growth that prioritizes maintaining the character and beauty of the city that we have all chosen to live in is in the path we should take. This means taking the steps necessary to halt this project."

Friday, August 10, 2018

"3. Preserve the character and charm of the city as a great place to raise families-a vibrant downtown full of places for the entire city to enjoy and no high density housing in the middle of our downtown"

"Every action of the council should support one of those priorities and if elected these will be my focus."

Monday, August 6, 2018

"...and the City Council should focus more on working to cure these obvious problems and less on creating new problems with high density housing..."

Thursday, August 2, 2018

"The application for the Senior Housing project is still under review and public hearings have not yet taken place. There is still time to ensure Clayton residents' voices are heard. But it won't matter if the Council doesn't listen to the people they represent. That's why it's critical to vote for people who will have the interests of Clayton residents as their top priority, not transforming our downtown into something unrecognizable."

"It's inexplicable why the Council continues to push high density and residential development in our downtown."

"So just what does the City of Clayton gain by pushing through high density housing in our downtown? We have a good idea of what it will cost – the character and viability of our downtown. The vision for our city the Council seems to have is more like Rossmoor or Antioch, instead of Danville or Lafayette."

"A senior living high density rental complex does not serve the interest of the residents of Clayton and squanders our downtown."

Thursday, August 2, 2018

"The Hidden Traps of High Density Housing Downtown"

"Parking and Congestion will be a problem!"

"The Senior Housing project has asked for a Density Bonus. This allows the project to contain additional units that would otherwise not be allowed, reduced setbacks, relaxed height restrictions, relaxed open-space requirements, and reduced floor area rations."

"High Density Housing is Wrong for Downtown"

"From megachurches, to assisted living facilities, to high density housing, the theme over the past several years has been consistent. Developers enriching themselves at the expense of our downtown, at

every turn with the City Council not only laying out the welcome mat for them, but holding the door open too."

"Apparently the council thinks that high density senior living condos are consistent with the character of the city. They're wrong."

"The challenges these developments bring like a lack of parking, congestion, and the potential reduced viability of our downtown festivals and social gatherings are all things that threaten the character that's been cultivated for years in our city. The wrong kind of development at the wrong location can have a significant impact. We need a Council that takes that responsibility seriously and puts the interests of the residents above the interests of outside developers."

"Fear of litigation should not compel us to harm our city now to avoid a low potential risk in the future. If there is a future legal threat, the council could at that time assess the risk/reward of adopting a new ordinance, and therefore moot potential litigation."

In addition to your website written documentation and most recently at the very end of the February 4, 2020 city council meeting, you chime in with C.W. Wolfe, "I got you covered in the December request." This was in direct response to C.W. Wolfe's suggestion about the future council discussion of trying to "legally repeal" a slope density ordinance that I was exempted from in 2017. Since I have an interest in the Hoyer property, this seems to be a specific strategy to stop high density, developers and complete your personal preference of keeping high density away from Clayton. As you well know, the slope density ordinance would take off square footage in certain areas, which in turn, would lower the amount of units permitted. The timing alone is bold and it seems to strengthen your prejudice towards my project as well as strengthen our position in this sensitive topic.

Further, at the same meeting on February 4, your ex parte communication did not reveal which appellant you spoke with ex parte. I would think that this should have been disclosed to the public at the meeting. And the length of redundant and irrelevant extra questions asked to staff are ways to find loopholes or cause doubts which are from the desired text of SB 330 and the Housing Accountability Act since this project is to be evaluated broadly for an approval.

In conclusion, common law states that you only need to have "an unacceptable probability of actual of bias" for your recusal. I think a reasonable person can ascertain that you not only have an unacceptable amount of "probable bias" directly to my project but actual bias towards high density and developers. Your views are consistent before your election, after your election and up to the prior few closing minutes of the February 4, 2020 city council meeting—the very meeting for the fate of The Olivia on Marsh Creek development.

I would hope you seriously contemplate my request for your immediate recusal for the obvious significant downside of not recusing yourself. My email is: billjordan@sbcglobal.net.

Sincerely,

William Jordan, Developer and owner of The Olivia on Marsh Creek