

APPENDIX A

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

American River College - Technical Education Building Modernization Project
Sacramento County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	90.00	1000sqft	2.07	90,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2025
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MW hr)	590.31	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

Project Characteristics -

Land Use -

Demolition -

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Table Name	Column Name	Default Value	New Value
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblSequestration	NumberOfNewTrees	0.00	10.00

2.0 Emissions Summary

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2022	6-30-2022	0.6407	0.6407
2	7-1-2022	9-30-2022	0.5963	0.5963
3	10-1-2022	12-31-2022	0.5972	0.5972
4	1-1-2023	3-31-2023	0.5526	0.5526
5	4-1-2023	6-30-2023	0.3641	0.3641
		Highest	0.6407	0.6407

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	tons/yr										MT/yr					
Area	0.3933	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003
Energy	0.0127	0.1158	0.0972	6.9000e-004		8.8000e-003	8.8000e-003		8.8000e-003	8.8000e-003	0.0000	330.6195	330.6195	0.0125	4.3900e-003	332.2394
Mobile	0.4121	1.6710	4.1635	0.0141	1.3222	0.0113	1.3335	0.3543	0.0106	0.3648	0.0000	1,297.0405	1,297.0405	0.0586	0.0000	1,298.5052
Waste						0.0000	0.0000		0.0000	0.0000	23.7499	0.0000	23.7499	1.4036	0.0000	58.8395
Water						0.0000	0.0000		0.0000	0.0000	1.5618	12.3602	13.9220	5.9800e-003	3.5200e-003	15.1212
Total	0.8181	1.7868	4.2619	0.0148	1.3222	0.0201	1.3423	0.3543	0.0194	0.3736	25.3118	1,640.0224	1,665.3341	1.4806	7.9100e-003	1,704.7075

American River College - Technical Education Building Modernization Project - Sacramento 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	tons/yr										MT/yr					
Area	0.3670	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003
Energy	0.0125	0.1135	0.0953	6.8000e-004		8.6200e-003	8.6200e-003		8.6200e-003	8.6200e-003	0.0000	322.8459	322.8459	0.0122	4.2900e-003	324.4285
Mobile	0.4121	1.6710	4.1635	0.0141	1.3222	0.0113	1.3335	0.3543	0.0106	0.3648	0.0000	1,297.0405	1,297.0405	0.0586	0.0000	1,298.5052
Waste						0.0000	0.0000		0.0000	0.0000	20.1875	0.0000	20.1875	1.1930	0.0000	50.0136
Water						0.0000	0.0000		0.0000	0.0000	1.4588	11.5768	13.0355	5.5900e-003	3.2900e-003	14.1556
Total	0.7916	1.7845	4.2600	0.0148	1.3222	0.0200	1.3422	0.3543	0.0192	0.3735	21.6462	1,631.4654	1,653.1116	1.2694	7.5800e-003	1,687.1053

	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
Percent Reduction	3.24	0.13	0.05	0.07	0.00	0.89	0.01	0.00	0.93	0.05	14.48	0.52	0.73	14.27	4.17	1.03

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

2.3 Vegetation

Vegetation

	CO2e
Category	MT
New Trees	7.0800
Total	7.0800

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	4/1/2022	4/28/2022	5	20	
2	Site Preparation	Site Preparation	4/29/2022	5/3/2022	5	3	
3	Grading	Grading	5/4/2022	5/11/2022	5	6	
4	Building Construction	Building Construction	5/12/2022	3/15/2023	5	220	
5	Paving	Paving	3/16/2023	3/29/2023	5	10	
6	Architectural Coating	Architectural Coating	3/30/2023	4/12/2023	5	10	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 0

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 135,000; Non-Residential Outdoor: 45,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

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	5	13.00	0.00	409.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	38.00	15.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	8.00	0.00	0.00	10.00	6.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2022

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	tons/yr										MT/yr					
Fugitive Dust					0.0462	0.0000	0.0462	6.9900e-003	0.0000	6.9900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2120
Total	0.0169	0.1662	0.1396	2.4000e-004	0.0462	8.3800e-003	0.0546	6.9900e-003	7.8300e-003	0.0148	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2120

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

3.2 Demolition - 2022

Unmitigated 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	tons/yr										MT/yr					
Hauling	1.3700e-003	0.0494	0.0118	1.6000e-004	3.4500e-003	1.6000e-004	3.6100e-003	9.5000e-004	1.5000e-004	1.1000e-003	0.0000	15.2781	15.2781	8.8000e-004	0.0000	15.3000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	2.6000e-004	3.0200e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.6000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.7879	0.7879	2.0000e-005	0.0000	0.7884
Total	1.7900e-003	0.0497	0.0148	1.7000e-004	4.4000e-003	1.7000e-004	4.5700e-003	1.2000e-003	1.6000e-004	1.3600e-003	0.0000	16.0660	16.0660	9.0000e-004	0.0000	16.0884

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	tons/yr										MT/yr					
Fugitive Dust					0.0208	0.0000	0.0208	3.1500e-003	0.0000	3.1500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2119
Total	0.0169	0.1662	0.1396	2.4000e-004	0.0208	8.3800e-003	0.0292	3.1500e-003	7.8300e-003	0.0110	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2119

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

3.2 Demolition - 2022

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	tons/yr										MT/yr					
Hauling	1.3700e-003	0.0494	0.0118	1.6000e-004	3.4500e-003	1.6000e-004	3.6100e-003	9.5000e-004	1.5000e-004	1.1000e-003	0.0000	15.2781	15.2781	8.8000e-004	0.0000	15.3000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	2.6000e-004	3.0200e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.6000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.7879	0.7879	2.0000e-005	0.0000	0.7884
Total	1.7900e-003	0.0497	0.0148	1.7000e-004	4.4000e-003	1.7000e-004	4.5700e-003	1.2000e-003	1.6000e-004	1.3600e-003	0.0000	16.0660	16.0660	9.0000e-004	0.0000	16.0884

3.3 Site Preparation - 2022

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	tons/yr										MT/yr					
Fugitive Dust					2.3900e-003	0.0000	2.3900e-003	2.6000e-004	0.0000	2.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0700e-003	0.0235	0.0151	4.0000e-005		8.9000e-004	8.9000e-004		8.2000e-004	8.2000e-004	0.0000	3.2321	3.2321	1.0500e-003	0.0000	3.2582
Total	2.0700e-003	0.0235	0.0151	4.0000e-005	2.3900e-003	8.9000e-004	3.2800e-003	2.6000e-004	8.2000e-004	1.0800e-003	0.0000	3.2321	3.2321	1.0500e-003	0.0000	3.2582

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

3.3 Site Preparation - 2022

Unmitigated 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	tons/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	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	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.8000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0727	0.0727	0.0000	0.0000	0.0728
Total	4.0000e-005	2.0000e-005	2.8000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0727	0.0727	0.0000	0.0000	0.0728

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	tons/yr										MT/yr					
Fugitive Dust					1.0700e-003	0.0000	1.0700e-003	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0700e-003	0.0235	0.0151	4.0000e-005		8.9000e-004	8.9000e-004		8.2000e-004	8.2000e-004	0.0000	3.2321	3.2321	1.0500e-003	0.0000	3.2582
Total	2.0700e-003	0.0235	0.0151	4.0000e-005	1.0700e-003	8.9000e-004	1.9600e-003	1.2000e-004	8.2000e-004	9.4000e-004	0.0000	3.2321	3.2321	1.0500e-003	0.0000	3.2582

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

3.3 Site Preparation - 2022

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	tons/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	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	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	2.0000e-005	2.8000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0727	0.0727	0.0000	0.0000	0.0728
Total	4.0000e-005	2.0000e-005	2.8000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0727	0.0727	0.0000	0.0000	0.0728

3.4 Grading - 2022

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	tons/yr										MT/yr					
Fugitive Dust					0.0197	0.0000	0.0197	0.0101	0.0000	0.0101	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6200e-003	0.0510	0.0277	6.0000e-005		2.2300e-003	2.2300e-003		2.0500e-003	2.0500e-003	0.0000	5.4308	5.4308	1.7600e-003	0.0000	5.4747
Total	4.6200e-003	0.0510	0.0277	6.0000e-005	0.0197	2.2300e-003	0.0219	0.0101	2.0500e-003	0.0122	0.0000	5.4308	5.4308	1.7600e-003	0.0000	5.4747

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

3.4 Grading - 2022

Unmitigated 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	tons/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	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	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	6.0000e-005	7.0000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1818	0.1818	0.0000	0.0000	0.1819
Total	1.0000e-004	6.0000e-005	7.0000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1818	0.1818	0.0000	0.0000	0.1819

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	tons/yr										MT/yr					
Fugitive Dust					8.8500e-003	0.0000	8.8500e-003	4.5500e-003	0.0000	4.5500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6200e-003	0.0510	0.0277	6.0000e-005		2.2300e-003	2.2300e-003		2.0500e-003	2.0500e-003	0.0000	5.4308	5.4308	1.7600e-003	0.0000	5.4747
Total	4.6200e-003	0.0510	0.0277	6.0000e-005	8.8500e-003	2.2300e-003	0.0111	4.5500e-003	2.0500e-003	6.6000e-003	0.0000	5.4308	5.4308	1.7600e-003	0.0000	5.4747

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

3.4 Grading - 2022

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	tons/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	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	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	6.0000e-005	7.0000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1818	0.1818	0.0000	0.0000	0.1819
Total	1.0000e-004	6.0000e-005	7.0000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1818	0.1818	0.0000	0.0000	0.1819

3.5 Building Construction - 2022

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	tons/yr										MT/yr					
Off-Road	0.1549	1.2194	1.1985	2.0900e-003		0.0586	0.0586		0.0562	0.0562	0.0000	173.4129	173.4129	0.0335	0.0000	174.2493
Total	0.1549	1.2194	1.1985	2.0900e-003		0.0586	0.0586		0.0562	0.0562	0.0000	173.4129	173.4129	0.0335	0.0000	174.2493

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

3.5 Building Construction - 2022

Unmitigated 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	tons/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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6600e-003	0.1217	0.0316	3.0000e-004	7.3200e-003	3.1000e-004	7.6300e-003	2.1200e-003	3.0000e-004	2.4100e-003	0.0000	29.1309	29.1309	1.6300e-003	0.0000	29.1717
Worker	0.0103	6.4600e-003	0.0738	2.1000e-004	0.0233	1.6000e-004	0.0235	6.2000e-003	1.5000e-004	6.3400e-003	0.0000	19.2304	19.2304	4.7000e-004	0.0000	19.2422
Total	0.0139	0.1281	0.1054	5.1000e-004	0.0306	4.7000e-004	0.0311	8.3200e-003	4.5000e-004	8.7500e-003	0.0000	48.3613	48.3613	2.1000e-003	0.0000	48.4139

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	tons/yr										MT/yr					
Off-Road	0.1549	1.2194	1.1985	2.0900e-003		0.0586	0.0586		0.0562	0.0562	0.0000	173.4127	173.4127	0.0335	0.0000	174.2491
Total	0.1549	1.2194	1.1985	2.0900e-003		0.0586	0.0586		0.0562	0.0562	0.0000	173.4127	173.4127	0.0335	0.0000	174.2491

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

3.5 Building Construction - 2022

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	tons/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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6600e-003	0.1217	0.0316	3.0000e-004	7.3200e-003	3.1000e-004	7.6300e-003	2.1200e-003	3.0000e-004	2.4100e-003	0.0000	29.1309	29.1309	1.6300e-003	0.0000	29.1717
Worker	0.0103	6.4600e-003	0.0738	2.1000e-004	0.0233	1.6000e-004	0.0235	6.2000e-003	1.5000e-004	6.3400e-003	0.0000	19.2304	19.2304	4.7000e-004	0.0000	19.2422
Total	0.0139	0.1281	0.1054	5.1000e-004	0.0306	4.7000e-004	0.0311	8.3200e-003	4.5000e-004	8.7500e-003	0.0000	48.3613	48.3613	2.1000e-003	0.0000	48.4139

3.5 Building Construction - 2023

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	tons/yr										MT/yr					
Off-Road	0.0454	0.3610	0.3767	6.6000e-004		0.0163	0.0163		0.0156	0.0156	0.0000	55.0411	55.0411	0.0104	0.0000	55.3013
Total	0.0454	0.3610	0.3767	6.6000e-004		0.0163	0.0163		0.0156	0.0156	0.0000	55.0411	55.0411	0.0104	0.0000	55.3013

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

3.5 Building Construction - 2023

Unmitigated 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	tons/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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2000e-004	0.0326	8.8700e-003	9.0000e-005	2.3200e-003	5.0000e-005	2.3700e-003	6.7000e-004	4.0000e-005	7.2000e-004	0.0000	9.0743	9.0743	4.6000e-004	0.0000	9.0859
Worker	3.0500e-003	1.8400e-003	0.0215	6.0000e-005	7.4000e-003	5.0000e-005	7.4400e-003	1.9700e-003	5.0000e-005	2.0100e-003	0.0000	5.8739	5.8739	1.3000e-004	0.0000	5.8772
Total	3.9700e-003	0.0345	0.0304	1.5000e-004	9.7200e-003	1.0000e-004	9.8100e-003	2.6400e-003	9.0000e-005	2.7300e-003	0.0000	14.9481	14.9481	5.9000e-004	0.0000	14.9631

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	tons/yr										MT/yr					
Off-Road	0.0454	0.3610	0.3767	6.6000e-004		0.0163	0.0163		0.0156	0.0156	0.0000	55.0410	55.0410	0.0104	0.0000	55.3012
Total	0.0454	0.3610	0.3767	6.6000e-004		0.0163	0.0163		0.0156	0.0156	0.0000	55.0410	55.0410	0.0104	0.0000	55.3012

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

3.5 Building Construction - 2023

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	tons/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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2000e-004	0.0326	8.8700e-003	9.0000e-005	2.3200e-003	5.0000e-005	2.3700e-003	6.7000e-004	4.0000e-005	7.2000e-004	0.0000	9.0743	9.0743	4.6000e-004	0.0000	9.0859
Worker	3.0500e-003	1.8400e-003	0.0215	6.0000e-005	7.4000e-003	5.0000e-005	7.4400e-003	1.9700e-003	5.0000e-005	2.0100e-003	0.0000	5.8739	5.8739	1.3000e-004	0.0000	5.8772
Total	3.9700e-003	0.0345	0.0304	1.5000e-004	9.7200e-003	1.0000e-004	9.8100e-003	2.6400e-003	9.0000e-005	2.7300e-003	0.0000	14.9481	14.9481	5.9000e-004	0.0000	14.9631

3.6 Paving - 2023

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	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

3.6 Paving - 2023

Unmitigated 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	tons/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	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	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.4000e-004	1.6000e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4375	0.4375	1.0000e-005	0.0000	0.4377
Total	2.3000e-004	1.4000e-004	1.6000e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4375	0.4375	1.0000e-005	0.0000	0.4377

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	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

3.6 Paving - 2023

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	tons/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	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	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.3000e-004	1.4000e-004	1.6000e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4375	0.4375	1.0000e-005	0.0000	0.4377
Total	2.3000e-004	1.4000e-004	1.6000e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4375	0.4375	1.0000e-005	0.0000	0.4377

3.7 Architectural Coating - 2023

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	tons/yr										MT/yr					
Archit. Coating	0.4172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	0.4181	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

3.7 Architectural Coating - 2023

Unmitigated 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	tons/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	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	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	7.0000e-005	8.5000e-004	0.0000	2.9000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2333	0.2333	1.0000e-005	0.0000	0.2335
Total	1.2000e-004	7.0000e-005	8.5000e-004	0.0000	2.9000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2333	0.2333	1.0000e-005	0.0000	0.2335

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	tons/yr										MT/yr					
Archit. Coating	0.4172					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	0.4181	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

3.7 Architectural Coating - 2023

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	tons/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	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	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	7.0000e-005	8.5000e-004	0.0000	2.9000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2333	0.2333	1.0000e-005	0.0000	0.2335
Total	1.2000e-004	7.0000e-005	8.5000e-004	0.0000	2.9000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2333	0.2333	1.0000e-005	0.0000	0.2335

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

American River College - Technical Education Building Modernization Project - Sacramento 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	tons/yr										MT/yr					
Mitigated	0.4121	1.6710	4.1635	0.0141	1.3222	0.0113	1.3335	0.3543	0.0106	0.3648	0.0000	1,297.0405	1,297.0405	0.0586	0.0000	1,298.5052
Unmitigated	0.4121	1.6710	4.1635	0.0141	1.3222	0.0113	1.3335	0.3543	0.0106	0.3648	0.0000	1,297.0405	1,297.0405	0.0586	0.0000	1,298.5052

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Junior College (2Yr)	2,474.10	1,010.70	108.90	3,548,682	3,548,682
Total	2,474.10	1,010.70	108.90	3,548,682	3,548,682

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Junior College (2Yr)	10.00	5.00	6.50	6.40	88.60	5.00	92	7	1

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Junior College (2Yr)	0.568817	0.036545	0.209097	0.111572	0.015710	0.004830	0.018344	0.024276	0.001951	0.001803	0.005698	0.000617	0.000741

5.0 Energy Detail

Historical Energy Use: N

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

	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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	199.3204	199.3204	9.7900e-003	2.0300e-003	200.1689
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	204.5955	204.5955	0.0101	2.0800e-003	205.4665
NaturalGas Mitigated	0.0125	0.1135	0.0953	6.8000e-004		8.6200e-003	8.6200e-003		8.6200e-003	8.6200e-003	0.0000	123.5256	123.5256	2.3700e-003	2.2600e-003	124.2596
NaturalGas Unmitigated	0.0127	0.1158	0.0972	6.9000e-004		8.8000e-003	8.8000e-003		8.8000e-003	8.8000e-003	0.0000	126.0240	126.0240	2.4200e-003	2.3100e-003	126.7729

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas 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	tons/yr										MT/yr					
Junior College (2Yr)	2.3616e+006	0.0127	0.1158	0.0972	6.9000e-004		8.8000e-003	8.8000e-003		8.8000e-003	8.8000e-003	0.0000	126.0240	126.0240	2.4200e-003	2.3100e-003	126.7729
Total		0.0127	0.1158	0.0972	6.9000e-004		8.8000e-003	8.8000e-003		8.8000e-003	8.8000e-003	0.0000	126.0240	126.0240	2.4200e-003	2.3100e-003	126.7729

Mitigated

	NaturalGas 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	tons/yr										MT/yr					
Junior College (2Yr)	2.31478e+006	0.0125	0.1135	0.0953	6.8000e-004		8.6200e-003	8.6200e-003		8.6200e-003	8.6200e-003	0.0000	123.5256	123.5256	2.3700e-003	2.2600e-003	124.2596
Total		0.0125	0.1135	0.0953	6.8000e-004		8.6200e-003	8.6200e-003		8.6200e-003	8.6200e-003	0.0000	123.5256	123.5256	2.3700e-003	2.2600e-003	124.2596

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	764100	204.5955	0.0101	2.0800e-003	205.4665
Total		204.5955	0.0101	2.0800e-003	205.4665

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Junior College (2Yr)	744399	199.3204	9.7900e-003	2.0300e-003	200.1689
Total		199.3204	9.7900e-003	2.0300e-003	200.1689

6.0 Area Detail

6.1 Mitigation Measures Area

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Use Low VOC Cleaning Supplies

	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	tons/yr										MT/yr					
Mitigated	0.3670	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003
Unmitigated	0.3933	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

6.2 Area by SubCategory

Unmitigated

	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	tons/yr										MT/yr					
Architectural Coating	0.0417					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3515					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003
Total	0.3933	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003

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	tons/yr										MT/yr					
Architectural Coating	0.0417					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3252					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1000e-004	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003
Total	0.3671	1.0000e-005	1.1500e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.2300e-003	2.2300e-003	1.0000e-005	0.0000	2.3800e-003

7.0 Water Detail

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

7.1 Mitigation Measures Water

Install Low Flow Toilet

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	13.0355	5.5900e-003	3.2900e-003	14.1556
Unmitigated	13.9220	5.9800e-003	3.5200e-003	15.1212

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	4.41441 / 6.90459	13.9220	5.9800e-003	3.5200e-003	15.1212
Total		13.9220	5.9800e-003	3.5200e-003	15.1212

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Junior College (2Yr)	4.12306 / 6.48341	13.0355	5.5900e-003	3.2900e-003	14.1556
Total		13.0355	5.5900e-003	3.2900e-003	14.1556

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	20.1875	1.1930	0.0000	50.0136
Unmitigated	23.7499	1.4036	0.0000	58.8395

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	117	23.7499	1.4036	0.0000	58.8395
Total		23.7499	1.4036	0.0000	58.8395

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Junior College (2Yr)	99.45	20.1875	1.1930	0.0000	50.0136
Total		20.1875	1.1930	0.0000	50.0136

9.0 Operational Offroad

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

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

American River College - Technical Education Building Modernization Project - Sacramento County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT			
Unmitigated	7.0800	0.0000	0.0000	7.0800

11.2 Net New Trees

Species Class

	Number of Trees	Total CO2	CH4	N2O	CO2e
		MT			
Miscellaneous	10	7.0800	0.0000	0.0000	7.0800
Total		7.0800	0.0000	0.0000	7.0800

American River College - Technical Education Building Modernization Project - Sacramento County, Summary Report

American River College - Technical Education Building Modernization Project

Sacramento, Summary Report

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Junior College (2Yr)	90.00	1000sqft	2.07	90,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	3.5	Precipitation Freq (Days)	58
Climate Zone	6			Operational Year	2025
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MW hr)	590.31	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments

Only CalEEMod defaults were used.

American River College - Technical Education Building Modernization Project - Sacramento County, Summary Report

Project Characteristics -

Land Use -

Demolition -

Sequestration -

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

2.0 Peak Daily Emissions

Peak Daily Construction Emissions

Peak Daily Construction Emissions

