

Appendix A:
Air Quality and Greenhouse Gas Supporting Information

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Appendix A: Air Quality Modeling and Calculation Files

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Annual Construction Emissions (tons)

10x Genomics Redevelopment Project - Phase 1 Construction - Alameda County, Annual

Date: 1/7/2021 6:59 AM

Project Phase 1

Activity	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)	CO ₂ e (Metric Tons)
on site	0.04	0.34	0.02	0.02	44.1
off site	0.00	0.00	0.00	0.00	3.3
Phase 1 - Site Preparation 2021	0.04	0.34	0.02	0.02	47.4
on site	0.07	0.61	0.03	0.02	116.8
off site	0.00	0.10	0.00	0.00	30.4
Phase 1 - Demolition 2021	0.07	0.71	0.03	0.02	147.2
on site	0.06	0.75	0.03	0.03	87.4
off site	0.00	0.03	0.00	0.00	9.1
Phase 1 - Grading 2021	0.06	0.78	0.03	0.03	96.4
on site	0.08	0.50	0.02	0.02	66.6
off site	0.04	0.40	0.00	0.00	152.3
Phase 1 - Building Construction 2021	0.11	0.90	0.02	0.02	218.9
on site	0.02	0.08	0.00	0.00	11.6
off site	0.00	0.00	0.00	0.00	1.0
Phase 1 - Paving 2021	0.02	0.08	0.00	0.00	12.6
on site	0.85	0.22	0.01	0.01	24.8
off site	0.00	0.00	0.00	0.00	9.5
Phase 1 - Architectural Coating 2021	0.86	0.22	0.01	0.01	34.4
Phase 1 On Site	1.11	2.50	0.11	0.10	351.21
Phase 1 Off Site	0.05	0.54	0.00	0.00	205.68

Emissions amortized over 30 years: 18.6

10x Genomics Redevelopment Project - Phase 2 Construction - Alameda County, Annual

Date: 1/7/2021 7:46 AM

Project Phase 2

Activity	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)	CO ₂ e (Metric Tons)
on site	0.08	0.73	0.03	0.03	139.9
off site	0.01	0.12	0.00	0.00	36.9
Phase 2 - Demolition 2021	0.08	0.85	0.03	0.03	176.8
on site	0.01	0.08	0.00	0.00	10.7
off site	0.01	0.06	0.00	0.00	24.6
Phase 2 - Building Construction 2021	0.02	0.15	0.00	0.00	35.3
2021 on site	1.20	3.31	0.15	0.14	501.8
2021 off site	0.06	0.72	0.00	0.00	267.2
2021 TOTAL EMISSIONS	1.26	4.03	0.15	0.14	769.0

	on site	0.07	0.48	0.02	0.02	68.0
	off site	0.04	0.39	0.00	0.00	152.5
Phase 2 - Building Construction 2022		0.11	0.87	0.02	0.02	220.5
	on site	0.01	0.08	0.00	0.00	13.5
	off site	0.00	0.00	0.00	0.00	1.5
Phase 2 - Paving 2022		0.01	0.08	0.00	0.00	15.0
	on site	0.69	0.22	0.01	0.01	29.4
	off site	0.00	0.00	0.00	0.00	10.9
Phase 2 - Architectural Coating 2022		0.70	0.23	0.01	0.01	40.3
Phase 2 On Site		0.86	1.60	0.07	0.06	248.03
Phase 2 Off Site		0.05	0.58	0.00	0.00	226.38

Emissions amortized over 30 years: 15.8

10x Genomics Redevelopment Project - Phase 3 Construction - Alameda County, Annual

Date: 1/7/2021 7:39 AM

Project Phase 3

Activity	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)	CO ₂ e (Metric Tons)
	on site	0.03	0.18	0.01	0.01
	off site	0.00	0.05	0.00	0.00
Phase 3 - Building Construction 2022		0.03	0.23	0.01	0.01
	on site	0.00	0.03	0.00	0.00
	off site	0.00	0.00	0.00	0.00
Phase 3 - Paving 2022		0.00	0.03	0.00	0.00
	on site	0.62	0.07	0.00	0.00
	off site	0.00	0.00	0.00	0.00
Phase 3 - Architectural Coating 2022		0.62	0.07	0.00	0.00
Phase 3 On Site		0.65	0.28	0.01	0.01
Phase 3 Off Site		0.00	0.05	0.00	0.00
Emissions amortized over 30 years:					2.0
2022 on site	1.42	1.07	0.05	0.04	150.4
2022 off site	0.05	0.44	0.00	0.00	184.0
2022 TOTAL EMISSIONS	1.47	1.51	0.05	0.05	334.4

Average Daily Construction Emissions (lbs/day)

	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)
Total Emissions (tons)	2.73	5.54	0.20	0.18
Total Emissions (lbs)	5,461.04	11,080.14	393.84	368.16
Average Daily Emissions (lbs/day) ²	14.33	29.08	1.03	0.97

Total Construction Workdays: 381

Operational 2022 Emissions Summary (Existing)

Existing Operations - Summer and Winter Scenarios

10x Genomics Redevelopment Project - Existing Operations Year 2022 - Alameda County, Summer
 CalEEMod Run: Summer. Date: 1/7/2021 8:00 AM

Emissions Source	Pounds per Day			
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)
Area	4.13	0.00	0.00	0.00
Energy	0.01	0.10	0.01	0.01
Mobile	1.31	7.30	0.04	0.04
Total	5.46	7.40	0.05	0.04

10x Genomics Redevelopment Project - Existing Operations Year 2022 - Alameda County, Winter
 CalEEMod Run: Winter. Date: 1/7/2021 8:01 AM

Emissions Source	Pounds per Day			
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)
Area	4.13	0.00	0.00	0.00
Energy	0.01	0.10	0.01	0.01
Mobile	1.12	7.49	0.04	0.04
Total	5.26	7.59	0.05	0.04

Existing Operations - Maximum Daily Emissions

10x Genomics Redevelopment Project - Existing Operations Year 2022
 Maximum between Summer and Winter Scenarios

Emissions Source	Pounds per Day			
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)
Total	5.46	7.59	0.05	0.04
CalEEMod Run	Summer	Winter	Winter	Winter

Operational 2022 Emissions Summary

Proposed Project Operations - Summer and Winter Scenarios

10x Genomics Redevelopment Project - Project Operations Year 2022 - Alameda County, Summer
 CalEEMod Run: Summer. Date: 1/8/2021 8:41 AM

Emissions Source	Pounds per Day			
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)
Area	9.44	0.00	0.00	0.00
Energy	0.03	0.24	0.02	0.02
Mobile	6.65	7.38	0.16	0.14
Stationary	0.00	0.00	0.00	0.00
Total	16.12	7.62	0.17	0.16

10x Genomics Redevelopment Project - Project Operations Year 2022 - Alameda County, Winter
 CalEEMod Run: Winter. Date: 1/8/2021 8:42 AM

Emissions Source	Pounds per Day			
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)
Area	9.44	0.00	0.00	0.00
Energy	0.03	0.24	0.02	0.02
Mobile	5.26	8.69	0.16	0.14
Stationary	0.00	0.00	0.00	0.00
Total	14.73	8.93	0.17	0.16

Proposed Project Operations - Maximum Daily Emissions

10x Genomics Redevelopment Project - Project Operations Year 2022
 Maximum between Summer and Winter Scenarios

Emissions Source	Pounds per Day			
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)
Existing Total	5.46	7.59	0.05	0.04
Proposed Project	16.12	8.93	0.17	0.16
CalEEMod Run	Summer	Winter	Winter	Winter
Net Proposed Project Emissions	10.66	1.34	0.13	0.12

Net Annual Operational 2022 Emissions Summary

Existing Operations - Annual Emissions

10x Genomics Redevelopment Project - Existing Operations Year 2022 - Alameda County, Annual

Caleemod Run: Annual. Date: 1/7/2021 7:57 AM

Emissions Source	Tons per Year				Metric Tons per Year		
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)	Total CO ₂ e	Bio-CO ₂	NBio-CO ₂ e
Area	0.75	0.00	0.00	0.00	0.0	0.0	0.0
Energy	0.00	0.02	0.00	0.00	200.8	0.0	200.8
Mobile	0.21	1.35	0.01	0.01	680.5	0.0	680.5
Stationary	0.00	0.00	0.00	0.00	0.0	0.0	0.0
Waste	0.00	0.00	0.00	0.00	86.3	34.8	51.5
Water	0.00	0.00	0.00	0.00	25.3	3.8	21.5
Annual Total	0.96	1.37	0.01	0.01	992.9	38.7	954.2

Proposed Project Operations - Annual Emissions

10x Genomics Redevelopment Project - Project Operations Year 2022 - Alameda County, Annual

Caleemod Run: Annual. Date: 1/8/2021 8:35 AM

Emissions Source	Tons per Year				Metric Tons per Year		
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)	Total CO ₂ e	Bio-CO ₂	NBio-CO ₂ e
Area	1.72	0.00	0.00	0.00	0.0	0.0	0.0
Energy	0.00	0.04	0.00	0.00	1256.9	0.0	1256.9
Mobile	0.98	1.48	0.03	0.03	3382.3	0.0	3382.3
Stationary	0.00	0.02	0.00	0.00	-	-	-
Waste	0.00	0.00	0.00	0.00	112.2	45.3	66.9
Water	0.00	0.00	0.00	0.00	243.4	37.2	206.2
Annual Total	2.71	1.54	0.03	0.03	4994.8	82.4	4912.4
<i>Amortized Construction Emissions (30 years)</i>							36.3
Total Operational GHG Emissions (MTCO₂e/year)							4,948.7

Note:

All operational emissions were taken from the Mitigated model results to account for BAAQMD and City requirements. For GHG emissions, only non-biogenic CO₂e emissions are included in the project's operational GHG emissions, per BAAQMD's 2017 CEQA Air Quality Guidelines. In addition, per BAAQMD's 2017 CEQA Air Quality Guidelines, stationary source GHG emissions are separated from the project's operational GHG emissions and are analyzed against the BAAQMD's stationary source threshold.

Net Operational Emissions between Existing and Proposed

Emissions Source	Tons per Year				Metric Tons per Year
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)	
Annual Total	1.75	0.17	0.02	0.02	3,994.4

Annual Stationary Source GHG Emissions

Emissions Source	Metric Tons per Year
	Total CO ₂ e
Stationary	2.3

Note:

Per BAAQMD's 2017 CEQA Air Quality Guidelines, stationary source GHG emissions are separated from the project's operational GHG emissions are analyzed against the BAAQMD's stationary source threshold.

Net Annual Operational 2030 Emissions Summary

Existing Operations - Annual Emissions

10x Genomics Redevelopment Project - Existing Operations Year 2030 - Alameda County, Annual

CalEEMod Run: Annual. Date: 1/7/2021 8:06 AM

Emissions Source	Tons per Year				Metric Tons per Year		
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)	Total CO ₂ e	Bio-CO ₂	NBio-CO ₂ e
Area	0.75	0.00	0.00	0.00	0.0	0.0	0.0
Energy	0.00	0.02	0.00	0.00	178.7	0.0	178.7
Mobile	0.13	1.01	0.00	0.00	572.0	0.0	572.0
Stationary	0.00	0.00	0.00	0.00	-	-	-
Waste	0.00	0.00	0.00	0.00	86.3	34.8	51.5
Water	0.00	0.00	0.00	0.00	24.2	3.8	20.4
Annual Total	0.88	1.02	0.01	0.01	861.3	38.7	822.6

Proposed Project Operations - Annual Emissions

10x Genomics Redevelopment Project - Project Operations Year 2030 - Alameda County, Annual

CalEEMod Run: Annual. Date: 1/8/2021 8:47 AM

Emissions Source	Tons per Year				Metric Tons per Year		
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)	Total CO ₂ e	Bio-CO ₂	NBio-CO ₂ e
Area	1.72	0.00	0.00	0.00	0.0	0.0	0.0
Energy	0.00	0.04	0.00	0.00	1108.9	0.0	1108.9
Mobile	0.52	0.79	0.02	0.02	2570.6	0.0	2570.6
Stationary	0.00	0.02	0.00	0.00	-	-	-
Waste	0.00	0.00	0.00	0.00	112.2	45.3	66.9
Water	0.00	0.00	0.00	0.00	233.1	37.2	195.9
Annual Total	2.25	0.86	0.02	0.02	4024.9	82.4	3942.4
<i>Amortized Construction Emissions (30 years)</i>							36.3
Total Operational GHG Emissions (MTCO₂e/year)							3,978.7

Note:

All operational emissions were taken from the Mitigated model results to account for BAAQMD and City requirements. For GHG emissions, only non-biogenic CO₂e emissions are included in the project's operational GHG emissions, per BAAQMD's 2017 CEQA Air Quality Guidelines. In addition, per BAAQMD's 2017 CEQA Air Quality Guidelines, stationary source GHG emissions are separated from the project's operational GHG emissions and are analyzed against the BAAQMD's stationary source threshold.

Net Operational Emissions between Existing and Proposed

Emissions Source	Tons per Year				Metric Tons per Year
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)	
Annual Total	1.37	-0.17	0.02	0.02	3,156.2

Annual Stationary Source GHG Emissions

Emissions Source	Metric Tons per Year	
	Total CO ₂ e	
Stationary	2.3	

Note:

Per BAAQMD's 2017 CEQA Air Quality Guidelines, stationary source GHG emissions are separated from the project's operational GHG emissions are analyzed against the BAAQMD's stationary source threshold.

10x Genomics Redevelopment Project CalEEMod Notes

The following notes correspond with the note entries in the CalEEMod output files contained in this Appendix. Please refer to the CalEEMod output files to identify the corresponding note entry.

- Note 1. CO₂ Intensity Factor adjusted to match PG&E 2017 emissions rates, the latest that are publicly available.¹ The intensity factor utilized in the model is 210 pounds per megawatt-hour delivered.
- Note 2. Land uses and sizes associated with development of the proposed project are drawn from information provided by the applicant dated October 22, 2020, and revised January 6, 2021. Land uses utilized in the model represent the following:

Construction Phase 1

Commercial > General Office Building > 80 x 1000sqft = Proposed 80,000 square feet of office space included in Phase 1 of the proposed project.

Industrial > Unrefrigerated Warehouse-No Rail > 20 x 1000sqft = Proposed 20,000 square feet of warehouse, packaging, and distribution space included in Phase 1 of the proposed project.

Commercial > Research & Development > 50 x 1000sqft = Proposed 50,000 square feet of production laboratory space included in Phase 1 of the proposed project.

Parking > Parking Lot > 600 x Space = Proposed 600 surface parking spaces included in Phase 1 of the proposed project.

Recreational > City Park > 8.09 x Acre = Remaining balance of project site assumed to be landscaping. This land use is included only in the construction models as it is intended to capture the need for total area graded during grading activities and the anticipated landscaping water consumption would be captured within the outdoor water consumption rates for the other land uses in the model.

Construction Phase 2

Commercial > General Office Building > 63.25 x 1000sqft = Proposed 63,250 square feet of office space included in Phase 2 of the proposed project.

Commercial > Research & Development > 51.75 x 1000sqft = Proposed 51,750 square feet of production laboratory space included in Phase 2 of the proposed project.

Parking > Unenclosed Parking Structure with Elevator > 1,168 x Space = Proposed 354,000 square feet of parking structure space included in Phase 2 of the proposed project. Because the inclusion of an elevator with the parking structure was unknown at the time of this assessment, the parking structure was conservatively assumed to contain an elevator.

¹ Pacific Gas & Electric. 2018. Corporate Responsibility and Sustainability Report 2018. Website: http://www.pgecorp.com/corp_responsibility/reports/2018/assets/PGE_CRSR_2018.pdf. Accessed June 18, 2020.

Construction Phase 3

Commercial > General Office Building > $63.83 \times 1000\text{sqft} =$ Proposed 63,834 square feet of office space included in Phase 3 of the proposed project.

Commercial > Research & Development > $52.23 \times 1000\text{sqft} =$ Proposed 52,228 square feet of production laboratory space included in Phase 3 of the proposed project.

Parking > Parking Lot > $90 \times \text{Space} =$ Proposed 90 surface parking spaces included in Phase 3 of the proposed project.

Proposed Project Operation

Commercial > General Office Building > $207.08 \times 1000\text{sqft} =$ Proposed 207,084 gross square feet of office space included in the proposed project.

Industrial > Unrefrigerated Warehouse-No Rail > $20 \times 1000\text{sqft} =$ Proposed 20,000 square feet of warehouse, packaging, and distribution space included in Phase 1 of the proposed project.

Commercial > Research & Development > $153.98 \times 1000\text{sqft} =$ Proposed 153,978 gross square feet of production laboratory space included in the proposed project.

Parking > Unenclosed Parking Structure with Elevator > $1,168 \times \text{Space} =$ Proposed 354,000 square feet of parking structure space included in Phase 2 of the proposed project. Because the inclusion of an elevator with the parking structure was unknown at the time of this assessment, the parking structure was conservatively assumed to contain an elevator.

Parking > Parking Lot > $90 \times \text{Space} =$ Proposed 90 surface parking spaces included in Phase 3 of the proposed project.

Existing Land Uses Operation

Retail > Regional Shopping Center > $163.5 \times 1000\text{sqft} =$ Existing 163,500 gross square feet of retail shopping space currently occupying the project site.

Parking > Parking Lot > $340 \times 1000\text{sqft} =$ Existing 340,000 square feet of parking lot currently occupying the project site.

- Note 3. According to Applicant-provided information, dated October 22, 2020, and revised January 6, 2021, project construction is anticipated to occur from January 15, 2021, through July 1, 2022. The anticipated construction schedule provided in the Applicant-provided information is illustrated below in Table 1.

Table 1: Anticipated Construction Schedule

Phase	Phase Start Date	Phase End Date	Working Days per Week	Total Number of Working Days
Site Preparation	01/15/2021	04/01/2021	5	54

Phase	Phase Start Date	Phase End Date	Working Days per Week	Total Number of Working Days
Demolition	04/01/2021	06/01/2021	5	44
Grading	06/01/2021	08/01/2021	5	44
Building Construction	08/01/2021	07/01/2022	5	239
Paving	10/01/2021	01/15/2022	5	76
Architectural Coating	10/01/2021	07/01/2022	5	195

As the proposed project would occur over three separate phases, the anticipated construction schedule displayed in Table 1 was adjusted to accommodate the phased nature of the proposed project. As the entire project site would be prepared for construction (i.e., vegetation removal) and graded in Phase 1 of the project, the schedule for those construction activities would occur in their entirety during Phase 1 of the project and remain unchanged.

Demolition activities would occur over 44 total working days, as displayed in Table 1; however, demolition activities would involve the removal of an estimated 163,500 square feet of existing building space during Phase 1 and an estimated 240,000 square feet of pavement during Phase 2. As calculated in the Hauling Calculations sheet contained in this Appendix, the building demolition would generate an estimated 7,521 tons of debris, or approximately 46 percent of the total demolition debris generated, and the pavement demolition would generate an estimated 9,000 tons of debris, or approximately 54 percent of the total demolition debris generated. In the absence of a detailed schedule of when Phase 1 demolition activities and Phase 2 demolition activities would occur, it was assumed that approximately 46 percent of demolition activities would occur during Phase 1 and approximately 54 percent of demolition activities would occur during Phase 2 of the proposed project.

For paving, building construction, and architectural coating activities, the schedules were adjusted so that these activities would occur within each project phase and the duration of which would reflect that project phase's proportion of the total proposed square footage of development. When accounting for all proposed land uses, Phase 1 would involve the development of a total 390,000 square feet of office, warehouse, distribution, packaging, production laboratories, and parking space, or approximately 39 percent of the total proposed development; Phase 2 would involve the development of a total 469,270 square feet of office, production laboratories, and parking space, or approximately 46 percent of the total proposed development; and Phase 3 would involve the development of a total 152,062 square feet of office, production laboratories, and parking space, or approximately 15 percent of the total proposed development. Consistent with the anticipated construction schedule provided by the applicant, paving and architectural coating activity schedules were adjusted to start concurrently in each construction phase and the architectural coating activity scheduled was adjusted to end the same day as building construction activities in each construction phase. In all adjusted construction activity schedules, the total number of

working days remained the same as those provided by the applicant in Table 1. See Table 2 for the adjusted construction schedule.

Table 2: Adjusted Construction Schedule

Construction Activity	Phase Start Date	Phase End Date	Working Days per Week	Total Number of Working Days
Project Phase 1				
Site Preparation	01/18/2021	04/01/2021	5	54
Demolition	04/02/2021	04/29/2021	5	20
Grading	04/30/2021	06/30/2021	5	44
Building Construction	07/01/2021	11/08/2021	5	93
Paving	07/26/2021	09/03/2021	5	30
Architectural Coating	07/26/2021	11/08/2021	5	76
Project Phase 2				
Demolition	11/09/2021	12/10/2021	5	24
Building Construction	12/11/2021	05/13/2022	5	110
Paving	01/10/2022	02/25/2022	5	35
Architectural Coating	01/10/2022	05/13/2022	5	90
Project Phase 3				
Building Construction	05/16/2022	07/04/2022	5	36
Paving	05/25/2022	06/08/2022	5	11
Architectural Coating	05/25/2022	07/04/2022	5	29

Note 4. The construction equipment list was adjusted in CalEEMod to reflect Applicant-provided information, dated October 22, 2020, and revised January 6, 2021, as illustrated below in Table 3.

Table 3: Anticipated Construction Equipment List

Activity	Equipment	Amount	Hours per Day	Horsepower	Load Factor
Demolition	Sweepers/Scrubbers	1	4	64	0.46
	Other Construction Equipment	4	8	172	0.42
	Off-Highway Trucks	8	8	402	0.38
Site Preparation	Sweepers/Scrubbers	1	4	263	0.30
	Trenchers	2	8	78	0.50
	Excavators	2	8	158	0.38
Grading	Sweepers/Scrubbers	1	4	64	0.46
	Graders	2	8	187	0.41
	Scrapers	2	8	367	0.48

Building Construction	Sweepers/Scrubbers	1	4	64	0.46
	Welders	4	8	46	0.45
	Aerial Lifts	2	8	63	0.31
	Cranes	1	4	231	0.29
	Cement and Mortar Mixers	1	2	9	0.56
Paving	Sweepers/Scrubbers	1	4	64	0.46
	Cement and Mortar Mixers	1	2	9	0.56
	Pavers	1	8	130	0.42
	Rollers	1	8	80	0.38
Architectural Coating	Cranes	1	8	231	0.29
	Aerial Lifts	2	2	63	0.31
	Forklifts	1	4	89	0.20

- Note 5. According to Applicant-provided information, dated October 22, 2020, revised January 6, 2021, the proposed project would involve the removal of approximately 200 cubic yards of vegetation during site preparation activities and the exportation of approximately 1,500 cubic yards of cut soil during grading activities.
- Note 6. According to Applicant-provided information, dated October 22, 2020, and revised January 6, 2021, the proposed project would involve the removal of an estimated 163,500 square feet of existing building space during Phase 1 and an estimated 240,000 square feet of pavement during Phase 2. As calculated in the Hauling Calculations sheet contained in this Appendix, the building demolition would generate an estimated 7,521 tons of debris during Phase 1 and the pavement demolition would generate an estimated 9,000 tons of debris during Phase 2. See the Hauling Calculations sheet contained in this Appendix for more information.
- Note 7. During the proposed project construction model, all operational emission sources were reduced to zero to separate modeled construction emissions from operational emission results. During the proposed project and existing operational models, all construction emission sources were reduced to zero to separate modeled construction and operational emission results.
- Note 8. BAAQMD *Basic Construction Mitigation Measures Recommended For All Proposed Projects* was applied to this project. This includes watering exposed areas at minimum twice per day and limiting construction vehicle speeds to 15 miles per hour on unpaved roads.
- Note 9. Based on draft traffic volume data for the proposed project provided by the City of Pleasanton via email on January 5, 2021, the proposed project would generate an estimated 4,520 new vehicle trips daily. The draft traffic volumes show that, upon full project buildout, the 735 employees to occupy the proposed office space would generate an estimated 2,410 daily vehicle trips, the 640 employees to occupy the proposed production laboratory space would generate an estimated 2,110 daily vehicle trips, and the 40 employees to occupy the

proposed warehouse space would generate an estimated 120 daily vehicle trips. In addition, an estimated 20 daily truck trips would be generated by the proposed project for product and resource delivery. The draft traffic volume data also showed that the proposed project's generated traffic volumes would be reduced through the use of nearby transit facilities by an estimated 140 daily vehicle trips, resulting in an estimated 4,520 new daily vehicle trips.

Therefore, the daily vehicle trip generation rate for the general office building land use in the model for the proposed project was adjusted to 21.83 average daily vehicle trips per 1,000 square feet to ensure that a total of 4,520 vehicle trips were represented in the model. The daily vehicle trip generation rate for unrefrigerated warehouse-no rail land use was adjusted to 1 average daily vehicle trips per 1,000 square feet to ensure that a total of 20 daily truck delivery trips were represented in the model. For the 4,520 daily vehicle trips represented by the general office building land use in the model, the fleet mix was adjusted to represent a 50/25/25 proportional division between light-duty auto (LDA), light-duty truck type 1 (LDT1), and light-duty truck type 2 (LDT2), respectively, as these trips would be generated by employees traveling to and from the project site. For the 20 daily truck delivery trips represented by the unrefrigerated warehouse-no rail land use in the model, the fleet mix was adjusted to represent a 50/50 proportional division between medium heavy-duty trucks (MHDT) and heavy heavy-duty trucks (HHDT).

For existing land uses, the draft traffic volume data estimates that the existing regional shopping center which the proposed project would demolish generates an estimated 840 daily vehicle trips. Therefore, the daily vehicle trip generation rate for regional shopping center land use was adjusted to 5.14 average daily vehicle trips per 1,000 square feet to ensure that a total of 840 daily vehicle trips were represented in the model.

- Note 10. Due to the unique nature of the proposed project, electricity and natural gas consumption rates for the proposed project were adjusted to reflect the consumption rates experienced in the existing 10x Genomics facility. Electricity and natural gas utility meter data for the existing 10x Genomics facility for March 2018 through April 2019 were utilized to estimate the anticipated electricity and natural gas consumption rates for the proposed project. Please see the Utility Calculations sheet contained in this Appendix for more information.
- Note 11. According to Applicant-provided information, dated October 22, 2020, and revised January 6, 2021, the proposed project would include one back-up diesel generator rated at 755 horsepower. The generator is assumed to be diesel-fueled and is anticipated to operate an annual hourly average of 8 hours/year for testing and maintenance purposes.
- Note 12. Pacific Gas and Electric's (PG&E) 2030 CO₂ intensity factor is derived from an assumed 2030 power mix based on equal proportions of generation sources in 2017. The only factor that has been uniquely adjusted for 2030 is the change of eligible renewable energy sources total proportion from 33% to 60% to comply with Senate Bill 100's 2030 performance goals. Based on known factors for PG&E's 2017 CO₂ intensity factor, a proximate CO₂ intensity factor of 184 pounds per megawatt-hour delivered was identified for 2030. Please see PG&E Intensity Factors in Appendix A of this report for more information.

Note 13. The outdoor water consumption rate for general office building was carried over to the other land uses for a consistent outdoor water consumption rate to capture anticipated water use generated by landscape maintenance across the entire project site.

10x Genomics Project Hauling Calculations

Site Preparation Hauling Requirements

Material	Description	Phase	-	-	-	-	Hauling Volume (cy) ⁽¹⁾
Trees/Vegetation	Softscape	1	-	-	-	-	200.00
Total Hauling Cubic Yards							200

Demolition Hauling Requirements

Material	Description	Phase	GSF ⁽¹⁾	Height/Depth (ft) ⁽²⁾	Density (lbs/cf) ⁽³⁾	Demolition Weight (pounds)	Hauling Weight (tons)
Buildings	Buildings	1	163,500	-	-	-	7,521.00
Pavement	Hardscape	2	240,000	0.5	150	18,000,000	9,000.00
Total Hauling Tons (Demolition Material)							16,521

Grading Hauling Requirements

Material	Description	Phase	-	-	Hauling Volume ⁽¹⁾
Import	Fill Soil	1	-	-	-
Export	Cut Soil	1	-	-	1,500.00
Total Hauling Cubic Yards (Grading Material)					1,500

Terms:

cy = cubic yard

gsf = gross square feet

cf = cubic feet

ft = feet

lbs = pounds

Building Demolition Debris Parameters ⁽⁴⁾			
1	building gsf	10	cf building volume
1	cf building volume	0.25	cf waste volume
1	cf	0.037	cy
1	cy waste volume	0.5	ton waste weight
1	gsf	0.046	ton waste material

Sources/Notes:

⁽¹⁾ Terrasset. 2020. 10X Genomics, 1701 Springdale Avenue Redevelopment - Request for Information. October 22, 2020, Revised December 18, 2020.

⁽²⁾ Pavement Source: DC Construction Services. 2017. How Thick Is Parking Lot Asphalt? Website: <https://dccpaving.com/how-thick-is-parking-lot-asphalt/>. Accessed November 30, 2020.

⁽³⁾ Pavement Source: SFGate. 2019. How to Calculate Asphalt Weight Per Yard. Website: <https://homeguides.sfgate.com/calculate-asphalt-weight-per-yard-81825.html>. Accessed November 30, 2020.

⁽⁴⁾ California Air Pollution Control Officers Association (CAPCOA). 2017. Appendix A Calculation Details for CalEEMod. October.

10x Genomics Redevelopment Project Utility Consumption Calculations

Existing 10x Genomics Building Information⁽¹⁾

Land Use Type	Square Feet (sf) ⁽²⁾	Proportion of Total Operational Space	Proportion of Total Operational Electricity Consumption	Calculated Electricity Consumption Rate (kWh/size/year)	Proportion of Total Operational Natural Gas Consumption	Calculated Natural Gas Consumption Rate (KBTU/size/year) ⁽³⁾
General & Administrative Offices	17,967	42%	558,583.54	31.09	416.65	2.32
Packaging, Warehouse, Distribution	11,122	26%	345,776.48	31.09	257.91	2.32
Production Labs	13,689	32%	425,583.02	31.09	317.44	2.32
Totals	42,778	100%	1,329,943.04	31.09	992.00	2.32

Electricity & Natural Gas Consumption

Utility Data⁽⁴⁾

Month	Electricity (kWh)	Natural Gas (US Therm)
Apr-19	122,845.29	39.00
Mar-19	109,021.78	117.00
Feb-19	115,534.62	277.00
Jan-19	113,709.59	193.00
Dec-18	112,981.42	204.00
Nov-18	107,296.17	112.00
Oct-18	113,856.03	8.00
Sep-18	105,055.77	8.00
Aug-18	117,471.05	9.00
Jul-18	113,205.72	4.00
Jun-18	101,400.40	9.00
May-18	97,565.20	12.00
Totals	1,329,943.04	992.00

CalEEMod Default Values & Proportions⁽⁵⁾

Land Use Type	Title 24 Electricity (kWh/size/year)	Non-Title 24 Electricity (kWh/size/year)	Title 24 Electricity (% of total)	Non-Title 24 Electricity (% of total)
General Office Building	6.11	7.84	43.8%	56.2%
Research & Development	1.48	3.7	28.6%	71.4%
Unrefrigerated Warehouse-No Rail	0.32	1.07	23.0%	77.0%
Land Use Type	Title 24 Natural Gas (KBTU/size/year)	Non-Title 24 Natural Gas (KBTU/size/year)	Title 24 Natural Gas (% of total)	Non-Title 24 Natural Gas (% of total)
General Office Building	16.31	0.06	99.6%	0.4%
Research & Development	19.71	6.67	74.7%	25.3%
Unrefrigerated Warehouse-No Rail	3.4	0.07	98.0%	2.0%

CalEEMod Inputs⁽⁵⁾

Land Use Type	Title 24 Electricity (KBTU/size/year)	Non-Title 24 Electricity (kWh/size/year)	Title 24 Natural Gas (KBTU/size/year)	Non-Title 24 Natural Gas (KBTU/size/year)
General Office Building	13.62	17.47	2.31	0.01
Research & Development	8.88	22.21	1.73	0.59
Unrefrigerated Warehouse-No Rail	7.16	23.93	2.27	0.05

Notes & Sources:

⁽¹⁾ Due to the unique nature of the proposed project, electricity and natural gas utility invoices for existing 10x Genomics operations were provided by the project applicant for the period March 2018 through April 2019. The most recent 12 months available were utilized to identify electricity and natural gas consumption rates for the proposed project.

⁽²⁾ Terrasset. 2020. 10X Genomics, 1701 Springdale Avenue Redevelopment - Request for Information. October 22, 2020, Revised December 18, 2020

⁽³⁾ Conversion rate of 1 US Therm = 100 KBTU was used to convert natural gas usage to KBTUs.

⁽⁴⁾ 10X TECHNOLOGIES. 2018, 2019. PG&E Energy Statements for Account No: XXXXXX6988-1. Statement Dates: 04/05/2018 through 05/08/2019.

⁽⁵⁾ As the existing 10x Genomics facility utility data includes both title 24 and non-title 24 electricity and natural gas consumption, the resource consumption rates taken from the existing 10x Genomics facility utility data were proportionally applied to both title 24 and non-title 24 consumption rates. Lighting energy intensity rates for these land uses were reduced to zero in the model as the existing utility data would include lighting.

⁽⁶⁾ "Size" in the tables above reference the size of the particular land use (square feet or dwelling unit).

10x Genomics Redevelopment Project - Phase 1 Construction - Alameda County, Annual

10x Genomics Redevelopment Project - Phase 1 Construction
Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	80.00	1000sqft	0.61	80,000.00	0
Research & Development	50.00	1000sqft	0.38	50,000.00	0
Unrefrigerated Warehouse-No Rail	20.00	1000sqft	0.15	20,000.00	0
Parking Lot	600.00	Space	5.40	240,000.00	0
City Park	1.87	Acre	8.09	81,457.20	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 4

Demolition - CalEEMod Note 6

Grading - CalEEMod Note 5

Vehicle Trips - CalEEMod Note 7

Consumer Products - CalEEMod Note 7

Area Coating - CalEEMod Note 7

Energy Use - CalEEMod Note 7

Water And Wastewater - CalEEMod Note 7

Solid Waste - CalEEMod Note 7

Construction Off-road Equipment Mitigation - CalEEMod Note 8

Off-road Equipment - CalEEMod Note 4

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	54.00
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	300.00	93.00
tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	20.00	76.00
tblConstructionPhase	PhaseEndDate	1/28/2021	4/29/2021
tblConstructionPhase	PhaseEndDate	2/11/2021	4/1/2021
tblConstructionPhase	PhaseEndDate	3/25/2021	6/30/2021
tblConstructionPhase	PhaseEndDate	5/19/2022	11/8/2021
tblConstructionPhase	PhaseEndDate	6/16/2022	9/3/2021
tblConstructionPhase	PhaseEndDate	7/14/2022	11/8/2021
tblConstructionPhase	PhaseStartDate	1/1/2021	4/2/2021
tblConstructionPhase	PhaseStartDate	1/29/2021	1/18/2021
tblConstructionPhase	PhaseStartDate	2/12/2021	4/30/2021
tblConstructionPhase	PhaseStartDate	3/26/2021	7/1/2021
tblConstructionPhase	PhaseStartDate	5/20/2022	7/26/2021
tblConstructionPhase	PhaseStartDate	6/17/2022	7/26/2021
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	LightingElect	2.14	0.00
tblEnergyUse	NT24E	7.84	0.00
tblEnergyUse	NT24E	3.70	0.00
tblEnergyUse	NT24E	1.07	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	NT24NG	6.67	0.00
tblEnergyUse	NT24NG	0.07	0.00

tblEnergyUse	T24E	6.11	0.00
tblEnergyUse	T24E	1.48	0.00
tblEnergyUse	T24E	0.32	0.00
tblEnergyUse	T24NG	16.31	0.00
tblEnergyUse	T24NG	19.71	0.00
tblEnergyUse	T24NG	3.40	0.00
tblGrading	MaterialExported	0.00	1,500.00
tblGrading	MaterialExported	0.00	200.00
tblLandUse	LotAcreage	1.84	0.61
tblLandUse	LotAcreage	1.15	0.38
tblLandUse	LotAcreage	0.46	0.15
tblLandUse	LotAcreage	1.87	8.09
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.46	0.46
tblOffRoadEquipment	LoadFactor	0.46	0.46
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers

tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblSolidWaste	SolidWasteGenerationRate	0.16	0.00
tblSolidWaste	SolidWasteGenerationRate	74.40	0.00
tblSolidWaste	SolidWasteGenerationRate	3.80	0.00
tblSolidWaste	SolidWasteGenerationRate	18.80	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	0.00

tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	14,218,699.84	0.00
tblWater	IndoorWaterUseRate	24,584,697.36	0.00
tblWater	IndoorWaterUseRate	4,625,000.00	0.00
tblWater	OutdoorWaterUseRate	2,228,070.12	0.00
tblWater	OutdoorWaterUseRate	8,714,687.00	0.00

2.0 Emissions Summary

2.1 Overall Construction

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	tons/yr										MT/yr					
2021	1.1585	3.0373	2.3050	6.2400e-003	0.2702	0.1141	0.3843	0.0522	0.1062	0.1584	0.0000	554.0207	554.0207	0.1146	0.0000	556.8847
Maximum	1.1585	3.0373	2.3050	6.2400e-003	0.2702	0.1141	0.3843	0.0522	0.1062	0.1584	0.0000	554.0207	554.0207	0.1146	0.0000	556.8847

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	tons/yr										MT/yr					
2021	1.1585	3.0373	2.3050	6.2400e-003	0.1873	0.1141	0.3015	0.0413	0.1062	0.1475	0.0000	554.0202	554.0202	0.1146	0.0000	556.8843
Maximum	1.1585	3.0373	2.3050	6.2400e-003	0.1873	0.1141	0.3015	0.0413	0.1062	0.1475	0.0000	554.0202	554.0202	0.1146	0.0000	556.8843

	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	0.00	0.00	0.00	0.00	30.65	0.00	21.55	20.83	0.00	6.86	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2021	3-31-2021	0.3639	0.3639
2	4-1-2021	6-30-2021	1.6315	1.6315
3	7-1-2021	9-30-2021	1.4901	1.4901
		Highest	1.6315	1.6315

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/18/2021	4/1/2021	5	54	
2	Demolition	Demolition	4/2/2021	4/29/2021	5	20	
3	Grading	Grading	4/30/2021	6/30/2021	5	44	
4	Building Construction	Building Construction	7/1/2021	11/8/2021	5	93	
5	Paving	Paving	7/26/2021	9/3/2021	5	30	
6	Architectural Coating	Architectural Coating	7/26/2021	11/8/2021	5	76	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 132

Acres of Paving: 5.4

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 225,000; Non-Residential Outdoor: 75,000; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48
Demolition	Off-Highway Trucks	8	8.00	402	0.38
Demolition	Other Construction Equipment	4	8.00	172	0.42
Demolition	Sweepers/Scrubbers	1	4.00	64	0.46
Site Preparation	Sweepers/Scrubbers	1	4.00	64	0.46
Site Preparation	Trenchers	2	8.00	78	0.50
Site Preparation	Excavators	2	8.00	158	0.38
Grading	Sweepers/Scrubbers	1	4.00	64	0.46
Building Construction	Sweepers/Scrubbers	1	4.00	64	0.46
Building Construction	Aerial Lifts	2	8.00	63	0.31

Building Construction	Cement and Mortar Mixers	1	2.00	9	0.56
Paving	Cement and Mortar Mixers	1	2.00	9	0.56
Paving	Sweepers/Scrubbers	1	4.00	64	0.46
Architectural Coating	Cranes	1	8.00	231	0.29
Architectural Coating	Aerial Lifts	2	2.00	63	0.31
Architectural Coating	Forklifts	1	4.00	89	0.20

Trips and VMT

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	13	33.00	0.00	744.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	13.00	0.00	25.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	188.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	185.00	77.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	37.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2021

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					1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0363	0.3350	0.3451	5.0000e-004		0.0215	0.0215		0.0198	0.0198	0.0000	43.7073	43.7073	0.0141	0.0000	44.0607	
Total	0.0363	0.3350	0.3451	5.0000e-004	1.0000e-005	0.0215	0.0215	0.0000	0.0198	0.0198	0.0000	43.7073	43.7073	0.0141	0.0000	44.0607	

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	1.0000e-004	3.3700e-003	6.3000e-004	1.0000e-005	2.1000e-004	1.0000e-005	2.2000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.9451	0.9451	5.0000e-005	0.0000	0.9462	
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	1.1200e-003	8.0000e-004	8.3700e-003	3.0000e-005	2.7800e-003	2.0000e-005	2.7900e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.3814	2.3814	6.0000e-005	0.0000	2.3829	
Total	1.2200e-003	4.1700e-003	9.0000e-003	4.0000e-005	2.9900e-003	3.0000e-005	3.0100e-003	8.0000e-004	3.0000e-005	8.3000e-004	0.0000	3.3265	3.3265	1.1000e-004	0.0000	3.3291	

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					1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0363	0.3350	0.3451	5.0000e-004		0.0215	0.0215		0.0198	0.0198	0.0000	43.7073	43.7073	0.0141	0.0000	44.0607	
Total	0.0363	0.3350	0.3451	5.0000e-004	1.0000e-005	0.0215	0.0215	0.0000	0.0198	0.0198	0.0000	43.7073	43.7073	0.0141	0.0000	44.0607	

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	1.0000e-004	3.3700e-003	6.3000e-004	1.0000e-005	2.1000e-004	1.0000e-005	2.2000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.9451	0.9451	5.0000e-005	0.0000	0.9462	
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	1.1200e-003	8.0000e-004	8.3700e-003	3.0000e-005	2.7800e-003	2.0000e-005	2.7900e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.3814	2.3814	6.0000e-005	0.0000	2.3829	
Total	1.2200e-003	4.1700e-003	9.0000e-003	4.0000e-005	2.9900e-003	3.0000e-005	3.0100e-003	8.0000e-004	3.0000e-005	8.3000e-004	0.0000	3.3265	3.3265	1.1000e-004	0.0000	3.3291	

3.3 Demolition - 2021

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							0.0805	0.0000	0.0805	0.0122	0.0000	0.0122	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0665	0.6067	0.4599	1.3200e-003			0.0253	0.0253		0.0233	0.0233	0.0000	115.8394	115.8394	0.0375	0.0000	116.7761
Total	0.0665	0.6067	0.4599	1.3200e-003	0.0805	0.0253	0.1058	0.0122	0.0233	0.0355	0.0000	115.8394	115.8394	0.0375	0.0000	116.7761	

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	2.9800e-003	0.1003	0.0186	2.9000e-004	6.3000e-003	3.1000e-004	6.6100e-003	1.7300e-003	2.9000e-004	2.0300e-003	0.0000	28.1247	28.1247	1.3900e-003	0.0000	28.1596	
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	1.0500e-003	7.5000e-004	7.8700e-003	2.0000e-005	2.6100e-003	2.0000e-005	2.6300e-003	6.9000e-004	2.0000e-005	7.1000e-004	0.0000	2.2390	2.2390	5.0000e-005	0.0000	2.2403	
Total	4.0300e-003	0.1011	0.0265	3.1000e-004	8.9100e-003	3.3000e-004	9.2400e-003	2.4200e-003	3.1000e-004	2.7400e-003	0.0000	30.3637	30.3637	1.4400e-003	0.0000	30.3999	

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							0.0362	0.0000	0.0362	5.4800e-003	0.0000	5.4800e-003	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0665	0.6067	0.4599	1.3200e-003			0.0253	0.0253		0.0233	0.0233	0.0000	115.8393	115.8393	0.0375	0.0000	116.7759
Total	0.0665	0.6067	0.4599	1.3200e-003	0.0362	0.0253	0.0615	5.4800e-003	0.0233	0.0288	0.0000	115.8393	115.8393	0.0375	0.0000	116.7759	

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	2.9800e-003	0.1003	0.0186	2.9000e-004	6.3000e-003	3.1000e-004	6.6100e-003	1.7300e-003	2.9000e-004	2.0300e-003	0.0000	28.1247	28.1247	1.3900e-003	0.0000	28.1596	
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	1.0500e-003	7.5000e-004	7.8700e-003	2.0000e-005	2.6100e-003	2.0000e-005	2.6300e-003	6.9000e-004	2.0000e-005	7.1000e-004	0.0000	2.2390	2.2390	5.0000e-005	0.0000	2.2403	
Total	4.0300e-003	0.1011	0.0265	3.1000e-004	8.9100e-003	3.3000e-004	9.2400e-003	2.4200e-003	3.1000e-004	2.7400e-003	0.0000	30.3637	30.3637	1.4400e-003	0.0000	30.3999	

3.4 Grading - 2021

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							0.0701	0.0000	0.0701	7.5700e-003	0.0000	7.5700e-003	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0633	0.7542	0.4074	9.9000e-004			0.0282	0.0282		0.0260	0.0260	0.0000	86.6635	86.6635	0.0280	0.0000	87.3642
Total	0.0633	0.7542	0.4074	9.9000e-004	0.0701	0.0282	0.0983	7.5700e-003	0.0260	0.0336	0.0000	86.6635	86.6635	0.0280	0.0000	87.3642	

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	7.5000e-004	0.0254	4.7000e-003	7.0000e-005	1.5900e-003	8.0000e-005	1.6700e-003	4.4000e-004	7.0000e-005	5.1000e-004	0.0000	7.1068	7.1068	3.5000e-004	0.0000	7.1156	
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	9.1000e-004	6.5000e-004	6.8200e-003	2.0000e-005	2.2600e-003	2.0000e-005	2.2800e-003	6.0000e-004	1.0000e-005	6.2000e-004	0.0000	1.9404	1.9404	5.0000e-005	0.0000	1.9416	
Total	1.6600e-003	0.0260	0.0115	9.0000e-005	3.8500e-003	1.0000e-004	3.9500e-003	1.0400e-003	8.0000e-005	1.1300e-003	0.0000	9.0472	9.0472	4.0000e-004	0.0000	9.0572	

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					0.0315	0.0000	0.0315	3.4100e-003	0.0000	3.4100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0633	0.7542	0.4074	9.9000e-004		0.0282	0.0282		0.0260	0.0260	0.0000	86.6634	86.6634	0.0280	0.0000	87.3641	
Total	0.0633	0.7542	0.4074	9.9000e-004	0.0315	0.0282	0.0598	3.4100e-003	0.0260	0.0294	0.0000	86.6634	86.6634	0.0280	0.0000	87.3641	

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	7.5000e-004	0.0254	4.7000e-003	7.0000e-005	1.5900e-003	8.0000e-005	1.6700e-003	4.4000e-004	7.0000e-005	5.1000e-004	0.0000	7.1068	7.1068	3.5000e-004	0.0000	7.1156	
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	9.1000e-004	6.5000e-004	6.8200e-003	2.0000e-005	2.2600e-003	2.0000e-005	2.2800e-003	6.0000e-004	1.0000e-005	6.2000e-004	0.0000	1.9404	1.9404	5.0000e-005	0.0000	1.9416	
Total	1.6600e-003	0.0260	0.0115	9.0000e-005	3.8500e-003	1.0000e-004	3.9500e-003	1.0400e-003	8.0000e-005	1.1300e-003	0.0000	9.0472	9.0472	4.0000e-004	0.0000	9.0572	

3.5 Building Construction - 2021

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	0.0754	0.5014	0.5165	8.3000e-004		0.0231	0.0231		0.0224	0.0224	0.0000	66.2390	66.2390	0.0145	0.0000	66.6026	
Total	0.0754	0.5014	0.5165	8.3000e-004		0.0231	0.0231		0.0224	0.0224	0.0000	66.2390	66.2390	0.0145	0.0000	66.6026	

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	0.0111	0.3830	0.0811	9.8000e-004	0.0235	8.0000e-004	0.0243	6.8000e-003	7.6000e-004	7.5700e-003	0.0000	93.7986	93.7986	5.1500e-003	0.0000	93.9274	
Worker	0.0275	0.0196	0.2050	6.5000e-004	0.0680	4.6000e-004	0.0685	0.0181	4.2000e-004	0.0185	0.0000	58.3656	58.3656	1.3900e-003	0.0000	58.4005	
Total	0.0386	0.4026	0.2862	1.6300e-003	0.0915	1.2600e-003	0.0928	0.0249	1.1800e-003	0.0261	0.0000	152.1642	152.1642	6.5400e-003	0.0000	152.3279	

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	0.0754	0.5014	0.5165	8.3000e-004		0.0231	0.0231		0.0224	0.0224	0.0000	66.2390	66.2390	0.0145	0.0000	66.6025	
Total	0.0754	0.5014	0.5165	8.3000e-004		0.0231	0.0231		0.0224	0.0224	0.0000	66.2390	66.2390	0.0145	0.0000	66.6025	

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	0.0111	0.3830	0.0811	9.8000e-004	0.0235	8.0000e-004	0.0243	6.8000e-003	7.6000e-004	7.5700e-003	0.0000	93.7986	93.7986	5.1500e-003	0.0000	93.9274	
Worker	0.0275	0.0196	0.2050	6.5000e-004	0.0680	4.6000e-004	0.0685	0.0181	4.2000e-004	0.0185	0.0000	58.3656	58.3656	1.3900e-003	0.0000	58.4005	
Total	0.0386	0.4026	0.2862	1.6300e-003	0.0915	1.2600e-003	0.0928	0.0249	1.1800e-003	0.0261	0.0000	152.1642	152.1642	6.5400e-003	0.0000	152.3279	

3.6 Paving - 2021

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	8.4700e-003	0.0846	0.0876	1.3000e-004		4.8300e-003	4.8300e-003		4.4500e-003	4.4500e-003	0.0000	11.4968	11.4968	3.6800e-003	0.0000	11.5888	
Paving	7.0700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0155	0.0846	0.0876	1.3000e-004		4.8300e-003	4.8300e-003		4.4500e-003	4.4500e-003	0.0000	11.4968	11.4968	3.6800e-003	0.0000	11.5888	

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	4.8000e-004	3.4000e-004	3.5800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0177	1.0177	2.0000e-005	0.0000	1.0183	
Total	4.8000e-004	3.4000e-004	3.5800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0177	1.0177	2.0000e-005	0.0000	1.0183	

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	8.4700e-003	0.0846	0.0876	1.3000e-004		4.8300e-003	4.8300e-003		4.4500e-003	4.4500e-003	0.0000	11.4967	11.4967	3.6800e-003	0.0000	11.5888	
Paving	7.0700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0155	0.0846	0.0876	1.3000e-004		4.8300e-003	4.8300e-003		4.4500e-003	4.4500e-003	0.0000	11.4967	11.4967	3.6800e-003	0.0000	11.5888	

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	4.8000e-004	3.4000e-004	3.5800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0177	1.0177	2.0000e-005	0.0000	1.0183	
Total	4.8000e-004	3.4000e-004	3.5800e-003	1.0000e-005	1.1900e-003	1.0000e-005	1.1900e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	1.0177	1.0177	2.0000e-005	0.0000	1.0183	

3.7 Architectural Coating - 2021

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	0.8322						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0189	0.2181	0.1183	2.8000e-004		9.2900e-003	9.2900e-003		8.5500e-003	8.5500e-003	0.0000	24.6160	24.6160	7.9600e-003	0.0000	24.8150	
Total	0.8511	0.2181	0.1183	2.8000e-004		9.2900e-003	9.2900e-003		8.5500e-003	8.5500e-003	0.0000	24.6160	24.6160	7.9600e-003	0.0000	24.8150	

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	4.4900e-003	3.2000e-003	0.0335	1.1000e-004	0.0111	7.0000e-005	0.0112	2.9600e-003	7.0000e-005	3.0300e-003	0.0000	9.5393	9.5393	2.3000e-004	0.0000	9.5450	
Total	4.4900e-003	3.2000e-003	0.0335	1.1000e-004	0.0111	7.0000e-005	0.0112	2.9600e-003	7.0000e-005	3.0300e-003	0.0000	9.5393	9.5393	2.3000e-004	0.0000	9.5450	

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	0.8322						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0189	0.2181	0.1183	2.8000e-004		9.2900e-003	9.2900e-003		8.5500e-003	8.5500e-003	0.0000	24.6159	24.6159	7.9600e-003	0.0000	24.8150	
Total	0.8511	0.2181	0.1183	2.8000e-004		9.2900e-003	9.2900e-003		8.5500e-003	8.5500e-003	0.0000	24.6159	24.6159	7.9600e-003	0.0000	24.8150	

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	4.4900e-003	3.2000e-003	0.0335	1.1000e-004	0.0111	7.0000e-005	0.0112	2.9600e-003	7.0000e-005	3.0300e-003	0.0000	9.5393	9.5393	2.3000e-004	0.0000	9.5450	
Total	4.4900e-003	3.2000e-003	0.0335	1.1000e-004	0.0111	7.0000e-005	0.0112	2.9600e-003	7.0000e-005	3.0300e-003	0.0000	9.5393	9.5393	2.3000e-004	0.0000	9.5450	

10x Genomics Redevelopment Project - Phase 1 Construction - Alameda County, Summer

10x Genomics Redevelopment Project - Phase 1 Construction
Alameda County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	80.00	1000sqft	0.61	80,000.00	0
Research & Development	50.00	1000sqft	0.38	50,000.00	0
Unrefrigerated Warehouse-No Rail	20.00	1000sqft	0.15	20,000.00	0
Parking Lot	600.00	Space	5.40	240,000.00	0
City Park	1.87	Acre	8.09	81,457.20	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 4

Demolition - CalEEMod Note 6

Grading - CalEEMod Note 5

Vehicle Trips - CalEEMod Note 7

Consumer Products - CalEEMod Note 7

Area Coating - CalEEMod Note 7

Energy Use - CalEEMod Note 7

Water And Wastewater - CalEEMod Note 7

Solid Waste - CalEEMod Note 7

Construction Off-road Equipment Mitigation - CalEEMod Note 8

Off-road Equipment - CalEEMod Note 4

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	54.00
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	300.00	93.00
tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	20.00	76.00
tblConstructionPhase	PhaseEndDate	1/28/2021	4/29/2021
tblConstructionPhase	PhaseEndDate	2/11/2021	4/1/2021
tblConstructionPhase	PhaseEndDate	3/25/2021	6/30/2021
tblConstructionPhase	PhaseEndDate	5/19/2022	11/8/2021
tblConstructionPhase	PhaseEndDate	6/16/2022	9/3/2021
tblConstructionPhase	PhaseEndDate	7/14/2022	11/8/2021
tblConstructionPhase	PhaseStartDate	1/1/2021	4/2/2021
tblConstructionPhase	PhaseStartDate	1/29/2021	1/18/2021
tblConstructionPhase	PhaseStartDate	2/12/2021	4/30/2021
tblConstructionPhase	PhaseStartDate	3/26/2021	7/1/2021
tblConstructionPhase	PhaseStartDate	5/20/2022	7/26/2021
tblConstructionPhase	PhaseStartDate	6/17/2022	7/26/2021
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	LightingElect	2.14	0.00
tblEnergyUse	NT24E	7.84	0.00
tblEnergyUse	NT24E	3.70	0.00
tblEnergyUse	NT24E	1.07	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	NT24NG	6.67	0.00
tblEnergyUse	NT24NG	0.07	0.00

tblEnergyUse	T24E	6.11	0.00
tblEnergyUse	T24E	1.48	0.00
tblEnergyUse	T24E	0.32	0.00
tblEnergyUse	T24NG	16.31	0.00
tblEnergyUse	T24NG	19.71	0.00
tblEnergyUse	T24NG	3.40	0.00
tblGrading	MaterialExported	0.00	1,500.00
tblGrading	MaterialExported	0.00	200.00
tblLandUse	LotAcreage	1.84	0.61
tblLandUse	LotAcreage	1.15	0.38
tblLandUse	LotAcreage	0.46	0.15
tblLandUse	LotAcreage	1.87	8.09
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.46	0.46
tblOffRoadEquipment	LoadFactor	0.46	0.46
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers

tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblSolidWaste	SolidWasteGenerationRate	0.16	0.00
tblSolidWaste	SolidWasteGenerationRate	74.40	0.00
tblSolidWaste	SolidWasteGenerationRate	3.80	0.00
tblSolidWaste	SolidWasteGenerationRate	18.80	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	0.00

tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	14,218,699.84	0.00
tblWater	IndoorWaterUseRate	24,584,697.36	0.00
tblWater	IndoorWaterUseRate	4,625,000.00	0.00
tblWater	OutdoorWaterUseRate	2,228,070.12	0.00
tblWater	OutdoorWaterUseRate	8,714,687.00	0.00

2.0 Emissions Summary

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/day										lb/day					
2021	26.0706	70.5760	48.6438	0.1640	8.9695	2.5657	11.5351	1.4689	2.3615	3.8304	0.0000	16,159.74	16,159.743	4.2851	0.0000	16,266.8704
Maximum	26.0706	70.5760	48.6438	0.1640	8.9695	2.5657	11.5351	1.4689	2.3615	3.8304	0.0000	16,159.74	16,159.743	4.2851	0.0000	16,266.8704

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					
2021	26.0706	70.5760	48.6438	0.1640	4.5436	2.5657	7.1092	0.7988	2.3615	3.1603	0.0000	16,159.74	16,159.743	4.2851	0.0000	16,266.8704
Maximum	26.0706	70.5760	48.6438	0.1640	4.5436	2.5657	7.1092	0.7988	2.3615	3.1603	0.0000	16,159.74	16,159.743	4.2851	0.0000	16,266.8704

	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	0.00	0.00	0.00	0.00	49.34	0.00	38.37	45.62	0.00	17.49	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/18/2021	4/1/2021	5	54	
2	Demolition	Demolition	4/2/2021	4/29/2021	5	20	
3	Grading	Grading	4/30/2021	6/30/2021	5	44	
4	Building Construction	Building Construction	7/1/2021	11/8/2021	5	93	
5	Paving	Paving	7/26/2021	9/3/2021	5	30	
6	Architectural Coating	Architectural Coating	7/26/2021	11/8/2021	5	76	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 132

Acres of Paving: 5.4

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 225,000; Non-Residential Outdoor: 75,000; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48
Demolition	Off-Highway Trucks	8	8.00	402	0.38
Demolition	Other Construction Equipment	4	8.00	172	0.42
Demolition	Sweepers/Scrubbers	1	4.00	64	0.46
Site Preparation	Sweepers/Scrubbers	1	4.00	64	0.46
Site Preparation	Trenchers	2	8.00	78	0.50
Site Preparation	Excavators	2	8.00	158	0.38
Grading	Sweepers/Scrubbers	1	4.00	64	0.46
Building Construction	Sweepers/Scrubbers	1	4.00	64	0.46
Building Construction	Aerial Lifts	2	8.00	63	0.31

Building Construction	Cement and Mortar Mixers		1	2.00	9	0.56
Paving	Cement and Mortar Mixers		1	2.00	9	0.56
Paving	Sweepers/Scrubbers		1	4.00	64	0.46
Architectural Coating	Cranes		1	8.00	231	0.29
Architectural Coating	Aerial Lifts		2	2.00	63	0.31
Architectural Coating	Forklifts		1	4.00	89	0.20

Trips and VMT

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	13	33.00	0.00	744.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	13.00	0.00	25.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	188.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	185.00	77.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	37.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2021

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/day										lb/day					
Fugitive Dust					4.2000e-004	0.0000	4.2000e-004	6.0000e-005	0.0000	6.0000e-005			0.0000			0.0000
Off-Road	1.3426	12.4064	12.7812	0.0184		0.7974	0.7974		0.7336	0.7336		1,784.410	1,784.4109	0.5771		1,798.8388
Total	1.3426	12.4064	12.7812	0.0184	4.2000e-004	0.7974	0.7978	6.0000e-005	0.7336	0.7337		1,784.4109	1,784.4109	0.5771		1,798.8388

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	lb/day												lb/day				
Hauling	3.6700e-003	0.1225	0.0224	3.7000e-004	8.1100e-003	3.8000e-004	8.4800e-003	2.2200e-003	3.6000e-004	2.5900e-003		38.8855	38.8855	1.8500e-003		38.9318	
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	
Worker	0.0439	0.0261	0.3386	1.0500e-003	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		104.8291	104.8291	2.4900e-003		104.8913	
Total	0.0476	0.1486	0.3610	1.4200e-003	0.1149	1.0700e-003	0.1160	0.0306	1.0000e-003	0.0316		143.7146	143.7146	4.3400e-003		143.8232	

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/day												lb/day				
Fugitive Dust					1.9000e-004	0.0000	1.9000e-004	3.0000e-005	0.0000	3.0000e-005		0.0000				0.0000	
Off-Road	1.3426	12.4064	12.7812	0.0184		0.7974	0.7974		0.7336	0.7336	0.0000	1,784.4109	1,784.4109	0.5771		1,798.8388	
Total	1.3426	12.4064	12.7812	0.0184	1.9000e-004	0.7974	0.7976	3.0000e-005	0.7336	0.7337	0.0000	1,784.4109	1,784.4109	0.5771		1,798.8388	

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/day												lb/day				
Hauling	3.6700e-003	0.1225	0.0224	3.7000e-004	8.1100e-003	3.8000e-004	8.4800e-003	2.2200e-003	3.6000e-004	2.5900e-003		38.8855	38.8855	1.8500e-003		38.9318	
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	
Worker	0.0439	0.0261	0.3386	1.0500e-003	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		104.8291	104.8291	2.4900e-003		104.8913	
Total	0.0476	0.1486	0.3610	1.4200e-003	0.1149	1.0700e-003	0.1160	0.0306	1.0000e-003	0.0316		143.7146	143.7146	4.3400e-003		143.8232	

3.3 Demolition - 2021

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/day										lb/day					
Fugitive Dust					8.0471	0.0000	8.0471	1.2184	0.0000	1.2184			0.0000			0.0000
Off-Road	6.6457	60.6680	45.9880	0.1319		2.5335	2.5335		2.3308	2.3308		12,769.11	12,769.112	4.1298		12,872.35
Total	6.6457	60.6680	45.9880	0.1319	8.0471	2.5335	10.5806	1.2184	2.3308	3.5492		12,769.11	12,769.112	4.1298		12,872.35
											25	5				72

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	lb/day										lb/day					
Hauling	0.2946	9.8416	1.7962	0.0294	0.6513	0.0305	0.6817	0.1786	0.0291	0.2077		3,124.526	3,124.5260	0.1490		3,128.250
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
Worker	0.1115	0.0663	0.8596	2.6700e-003	0.2711	1.7500e-003	0.2728	0.0719	1.6200e-003	0.0735		266.1046	266.1046	6.3200e-003		266.2626
Total	0.4061	9.9079	2.6558	0.0321	0.9224	0.0322	0.9546	0.2505	0.0308	0.2812		3,390.630	3,390.6306	0.1553		3,394.513
											6					2

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/day										lb/day					
Fugitive Dust					3.6212	0.0000	3.6212	0.5483	0.0000	0.5483			0.0000			0.0000
Off-Road	6.6457	60.6680	45.9880	0.1319		2.5335	2.5335		2.3308	2.3308	0.0000	12,769.11	12,769.112	4.1298		12,872.35
Total	6.6457	60.6680	45.9880	0.1319	3.6212	2.5335	6.1547	0.5483	2.3308	2.8791	0.0000	12,769.11	12,769.112	4.1298		12,872.35
											25	5				72

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/day											lb/day					
Hauling	0.2946	9.8416	1.7962	0.0294	0.6513	0.0305	0.6817	0.1786	0.0291	0.2077	3,124.5260	3,124.5260	0.1490			3,128.2507	
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	0.1115	0.0663	0.8596	2.6700e-003	0.2711	1.7500e-003	0.2728	0.0719	1.6200e-003	0.0735	266.1046	266.1046	6.3200e-003			266.2626	
Total	0.4061	9.9079	2.6558	0.0321	0.9224	0.0322	0.9546	0.2505	0.0308	0.2812	3,390.6306	3,390.6306	0.1553			3,394.5132	

3.4 Grading - 2021

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/day										lb/day					
Fugitive Dust					3.1854	0.0000	3.1854	0.3441	0.0000	0.3441	0.0000	0.0000	0.0000			0.0000
Off-Road	2.8792	34.2833	18.5193	0.0448		1.2838	1.2838		1.1811	1.1811	4,342.2795	4,342.2795	1.4044			4,377.3890
Total	2.8792	34.2833	18.5193	0.0448	3.1854	1.2838	4.4692	0.3441	1.1811	1.5252	4,342.2795	4,342.2795	1.4044			4,377.3890

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	lb/day										lb/day					
Hauling	0.0338	1.1304	0.2063	3.3800e-003	0.0748	3.5000e-003	0.0783	0.0205	3.3500e-003	0.0239	358.8776	358.8776	0.0171			359.3054
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	0.0439	0.0261	0.3386	1.0500e-003	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290	104.8291	104.8291	2.4900e-003			104.8913
Total	0.0778	1.1565	0.5449	4.4300e-003	0.1816	4.1900e-003	0.1858	0.0488	3.9900e-003	0.0528	463.7067	463.7067	0.0196			464.1968

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/day										lb/day					
Fugitive Dust					1.4334	0.0000	1.4334	0.1549	0.0000	0.1549			0.0000			0.0000
Off-Road	2.8792	34.2833	18.5193	0.0448		1.2838	1.2838		1.1811	1.1811	0.0000	4,342.2795	4,342.2795	1.4044		4,377.3890
Total	2.8792	34.2833	18.5193	0.0448	1.4334	1.2838	2.7172	0.1549	1.1811	1.3360	0.0000	4,342.2795	4,342.2795	1.4044		4,377.3890

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/day										lb/day						
Hauling	0.0338	1.1304	0.2063	3.3800e-003	0.0748	3.5000e-003	0.0783	0.0205	3.3500e-003	0.0239			358.8776	358.8776	0.0171	359.3054	
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	
Worker	0.0439	0.0261	0.3386	1.0500e-003	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290			104.8291	104.8291	2.4900e-003	104.8913	
Total	0.0778	1.1565	0.5449	4.4300e-003	0.1816	4.1900e-003	0.1858	0.0488	3.9900e-003	0.0528			463.7067	463.7067	0.0196		464.1968

3.5 Building Construction - 2021

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/day										lb/day					
Off-Road	1.6210	10.7821	11.1074	0.0179		0.4970	0.4970		0.4813	0.4813		1,570.2373	1,570.2373	0.3447		1,578.8555
Total	1.6210	10.7821	11.1074	0.0179		0.4970	0.4970		0.4813	0.4813		1,570.2373	1,570.2373	0.3447		1,578.8555

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	lb/day										lb/day						
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	0.2329	8.1558	1.6207	0.0213	0.5217	0.0170	0.5387	0.1502	0.0162	0.1664	2,249.558	2,249.5583	0.1168	2,252.479	0		
Worker	0.6250	0.3716	4.8192	0.0150	1.5197	9.8300e-003	1.5296	0.4031	9.0600e-003	0.4122	1,491.798	1,491.7984	0.0354	1,492.684	2		
Total	0.8578	8.5273	6.4399	0.0363	2.0415	0.0268	2.0683	0.5533	0.0253	0.5786	3,741.356	3,741.3567	0.1523	3,745.163	2		

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/day										lb/day						
Off-Road	1.6210	10.7821	11.1074	0.0179		0.4970	0.4970		0.4813	0.4813	0.0000	1,570.237	1,570.2373	0.3447		1,578.855	
Total	1.6210	10.7821	11.1074	0.0179		0.4970	0.4970		0.4813	0.4813	0.0000	1,570.237	1,570.2373	0.3447		1,578.855	

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/day										lb/day						
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	0.2329	8.1558	1.6207	0.0213	0.5217	0.0170	0.5387	0.1502	0.0162	0.1664	2,249.558	2,249.5583	0.1168	2,252.479	0		
Worker	0.6250	0.3716	4.8192	0.0150	1.5197	9.8300e-003	1.5296	0.4031	9.0600e-003	0.4122	1,491.798	1,491.7984	0.0354	1,492.684	2		
Total	0.8578	8.5273	6.4399	0.0363	2.0415	0.0268	2.0683	0.5533	0.0253	0.5786	3,741.356	3,741.3567	0.1523	3,745.163	2		

3.6 Paving - 2021

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/day										lb/day					
Off-Road	0.5647	5.6399	5.8378	8.7700e-003		0.3223	0.3223		0.2968	0.2968	0.0000	844.8670	844.8670	0.2705		851.6289
Paving	0.4716					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000
Total	1.0363	5.6399	5.8378	8.7700e-003		0.3223	0.3223		0.2968	0.2968		844.8670	844.8670	0.2705		851.6289

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	lb/day										lb/day					
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	0.0338	0.0201	0.2605	8.1000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223	0.0000	80.6378	80.6378	1.9200e-003		80.6856
Total	0.0338	0.0201	0.2605	8.1000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223		80.6378	80.6378	1.9200e-003		80.6856

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/day										lb/day					
Off-Road	0.5647	5.6399	5.8378	8.7700e-003		0.3223	0.3223		0.2968	0.2968	0.0000	844.8670	844.8670	0.2705		851.6289
Paving	0.4716					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000
Total	1.0363	5.6399	5.8378	8.7700e-003		0.3223	0.3223		0.2968	0.2968	0.0000	844.8670	844.8670	0.2705		851.6289

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/day										lb/day						
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	0.0338	0.0201	0.2605	8.1000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223	80.6378	80.6378	1.9200e-003	80.6856			
Total	0.0338	0.0201	0.2605	8.1000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223		80.6378	80.6378	1.9200e-003		80.6856	

3.7 Architectural Coating - 2021

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/day										lb/day						
Archit. Coating	21.9004						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.4963	5.7392	3.1138	7.3700e-003		0.2445	0.2445		0.2249	0.2249		714.0641	714.0641	0.2309		719.8377	
Total	22.3967	5.7392	3.1138	7.3700e-003		0.2445	0.2445		0.2249	0.2249		714.0641	714.0641	0.2309		719.8377	

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	lb/day										lb/day						
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	0.1250	0.0743	0.9638	2.9900e-003	0.3040	1.9700e-003	0.3059	0.0806	1.8100e-003	0.0824	298.3597	298.3597	7.0900e-003	298.5368			
Total	0.1250	0.0743	0.9638	2.9900e-003	0.3040	1.9700e-003	0.3059	0.0806	1.8100e-003	0.0824		298.3597	298.3597	7.0900e-003		298.5368	

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/day											lb/day					
Archit. Coating	21.9004						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.4963	5.7392	3.1138	7.3700e-003			0.2445	0.2445		0.2249	0.2249	0.0000	714.0641	714.0641	0.2309		719.8377
Total	22.3967	5.7392	3.1138	7.3700e-003			0.2445	0.2445		0.2249	0.2249	0.0000	714.0641	714.0641	0.2309		719.8377

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/day											lb/day					
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	0.1250	0.0743	0.9638	2.9900e-003	0.3040	1.9700e-003	0.3059	0.0806	1.8100e-003	0.0824		298.3597	298.3597	7.0900e-003		298.5368	
Total	0.1250	0.0743	0.9638	2.9900e-003	0.3040	1.9700e-003	0.3059	0.0806	1.8100e-003	0.0824		298.3597	298.3597	7.0900e-003		298.5368	

10x Genomics Redevelopment Project - Phase 1 Construction - Alameda County, Winter

10x Genomics Redevelopment Project - Phase 1 Construction

Alameda County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	80.00	1000sqft	0.61	80,000.00	0
Research & Development	50.00	1000sqft	0.38	50,000.00	0
Unrefrigerated Warehouse-No Rail	20.00	1000sqft	0.15	20,000.00	0
Parking Lot	600.00	Space	5.40	240,000.00	0
City Park	1.87	Acre	8.09	81,457.20	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 4

Demolition - CalEEMod Note 6

Grading - CalEEMod Note 5

Vehicle Trips - CalEEMod Note 7

Consumer Products - CalEEMod Note 7

Area Coating - CalEEMod Note 7

Energy Use - CalEEMod Note 7

Water And Wastewater - CalEEMod Note 7

Solid Waste - CalEEMod Note 7

Construction Off-road Equipment Mitigation - CalEEMod Note 8

Off-road Equipment - CalEEMod Note 4

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	54.00
tblConstructionPhase	NumDays	30.00	44.00
tblConstructionPhase	NumDays	300.00	93.00
tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	20.00	76.00
tblConstructionPhase	PhaseEndDate	1/28/2021	4/29/2021
tblConstructionPhase	PhaseEndDate	2/11/2021	4/1/2021
tblConstructionPhase	PhaseEndDate	3/25/2021	6/30/2021
tblConstructionPhase	PhaseEndDate	5/19/2022	11/8/2021
tblConstructionPhase	PhaseEndDate	6/16/2022	9/3/2021
tblConstructionPhase	PhaseEndDate	7/14/2022	11/8/2021
tblConstructionPhase	PhaseStartDate	1/1/2021	4/2/2021
tblConstructionPhase	PhaseStartDate	1/29/2021	1/18/2021
tblConstructionPhase	PhaseStartDate	2/12/2021	4/30/2021
tblConstructionPhase	PhaseStartDate	3/26/2021	7/1/2021
tblConstructionPhase	PhaseStartDate	5/20/2022	7/26/2021
tblConstructionPhase	PhaseStartDate	6/17/2022	7/26/2021
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	LightingElect	2.14	0.00
tblEnergyUse	NT24E	7.84	0.00
tblEnergyUse	NT24E	3.70	0.00
tblEnergyUse	NT24E	1.07	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	NT24NG	6.67	0.00
tblEnergyUse	NT24NG	0.07	0.00

tblEnergyUse	T24E	6.11	0.00
tblEnergyUse	T24E	1.48	0.00
tblEnergyUse	T24E	0.32	0.00
tblEnergyUse	T24NG	16.31	0.00
tblEnergyUse	T24NG	19.71	0.00
tblEnergyUse	T24NG	3.40	0.00
tblGrading	MaterialExported	0.00	1,500.00
tblGrading	MaterialExported	0.00	200.00
tblLandUse	LotAcreage	1.84	0.61
tblLandUse	LotAcreage	1.15	0.38
tblLandUse	LotAcreage	0.46	0.15
tblLandUse	LotAcreage	1.87	8.09
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	LoadFactor	0.42	0.42
tblOffRoadEquipment	LoadFactor	0.46	0.46
tblOffRoadEquipment	LoadFactor	0.46	0.46
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.38
tblOffRoadEquipment	OffRoadEquipmentType		Off-Highway Trucks
tblOffRoadEquipment	OffRoadEquipmentType		Other Construction Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers

tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	UsageHours	7.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblSolidWaste	SolidWasteGenerationRate	0.16	0.00
tblSolidWaste	SolidWasteGenerationRate	74.40	0.00
tblSolidWaste	SolidWasteGenerationRate	3.80	0.00
tblSolidWaste	SolidWasteGenerationRate	18.80	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	0.00

tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	14,218,699.84	0.00
tblWater	IndoorWaterUseRate	24,584,697.36	0.00
tblWater	IndoorWaterUseRate	4,625,000.00	0.00
tblWater	OutdoorWaterUseRate	2,228,070.12	0.00
tblWater	OutdoorWaterUseRate	8,714,687.00	0.00

2.0 Emissions Summary

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/day										lb/day					
2021	26.1180	70.8121	48.7484	0.1632	8.9695	2.5662	11.5356	1.4689	2.3620	3.8309	0.0000	16,080.64	16,080.643	4.2956	0.0000	16,188.03
Maximum	26.1180	70.8121	48.7484	0.1632	8.9695	2.5662	11.5356	1.4689	2.3620	3.8309	0.0000	16,080.64	16,080.643	4.2956	0.0000	16,188.03

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						
2021	26.1180	70.8121	48.7484	0.1632	4.5436	2.5662	7.1097	0.7988	2.3620	3.1608	0.0000 39	16,080.64 9	16,080.643	4.2956	0.0000	16,188.03 39	
Maximum	26.1180	70.8121	48.7484	0.1632	4.5436	2.5662	7.1097	0.7988	2.3620	3.1608	0.0000 39	16,080.64 9	16,080.643	4.2956	0.0000	16,188.03 39	

	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	0.00	0.00	0.00	0.00	49.34	0.00	38.37	45.62	0.00	17.49	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/18/2021	4/1/2021	5	54	
2	Demolition	Demolition	4/2/2021	4/29/2021	5	20	
3	Grading	Grading	4/30/2021	6/30/2021	5	44	
4	Building Construction	Building Construction	7/1/2021	11/8/2021	5	93	
5	Paving	Paving	7/26/2021	9/3/2021	5	30	
6	Architectural Coating	Architectural Coating	7/26/2021	11/8/2021	5	76	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 132

Acres of Paving: 5.4

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 225,000; Non-Residential Outdoor: 75,000; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	0	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Architectural Coating	Air Compressors	0	6.00	78	0.48
Demolition	Off-Highway Trucks	8	8.00	402	0.38
Demolition	Other Construction Equipment	4	8.00	172	0.42
Demolition	Sweepers/Scrubbers	1	4.00	64	0.46
Site Preparation	Sweepers/Scrubbers	1	4.00	64	0.46
Site Preparation	Trenchers	2	8.00	78	0.50
Site Preparation	Excavators	2	8.00	158	0.38
Grading	Sweepers/Scrubbers	1	4.00	64	0.46
Building Construction	Sweepers/Scrubbers	1	4.00	64	0.46
Building Construction	Aerial Lifts	2	8.00	63	0.31

Building Construction	Cement and Mortar Mixers	1	2.00	9	0.56
Paving	Cement and Mortar Mixers	1	2.00	9	0.56
Paving	Sweepers/Scrubbers	1	4.00	64	0.46
Architectural Coating	Cranes	1	8.00	231	0.29
Architectural Coating	Aerial Lifts	2	2.00	63	0.31
Architectural Coating	Forklifts	1	4.00	89	0.20

Trips and VMT

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	13	33.00	0.00	744.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	5	13.00	0.00	25.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	188.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	185.00	77.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	37.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2021

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/day											lb/day					
Fugitive Dust					4.2000e-004	0.0000	4.2000e-004	6.0000e-005	0.0000	6.0000e-005			0.0000			0.0000	
Off-Road	1.3426	12.4064	12.7812	0.0184		0.7974	0.7974		0.7336	0.7336		1,784.4109	1,784.4109	0.5771			1,798.8388
Total	1.3426	12.4064	12.7812	0.0184	4.2000e-004	0.7974	0.7978	6.0000e-005	0.7336	0.7337		1,784.4109	1,784.4109	0.5771			1,798.8388

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	lb/day											lb/day					
Hauling	3.7700e-003	0.1252	0.0243	3.6000e-004	8.1100e-003	3.8000e-003	8.4900e-003	2.2200e-003	3.7000e-004	2.5900e-003		38.1653	38.1653	1.9900e-003			38.2150
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
Worker	0.0458	0.0325	0.3186	9.7000e-004	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290		96.4654	96.4654	2.3300e-003			96.5236
Total	0.0496	0.1577	0.3429	1.3300e-003	0.1149	1.0700e-003	0.1160	0.0306	1.0100e-003	0.0316		134.6307	134.6307	4.3200e-003			134.7387

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/day											lb/day					
Fugitive Dust					1.9000e-004	0.0000	1.9000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000			0.0000	
Off-Road	1.3426	12.4064	12.7812	0.0184		0.7974	0.7974		0.7336	0.7336		0.0000	1,784.4109	1,784.4109	0.5771		1,798.8388
Total	1.3426	12.4064	12.7812	0.0184	1.9000e-004	0.7974	0.7976	3.0000e-005	0.7336	0.7337	0.0000	1,784.4109	1,784.4109	0.5771			1,798.8388

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/day											lb/day					
Hauling	3.7700e-003	0.1252	0.0243	3.6000e-004	8.1100e-003	3.8000e-004	8.4900e-003	2.2200e-003	3.7000e-004	2.5900e-003			38.1653	38.1653	1.9900e-003	38.2150	
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	
Worker	0.0458	0.0325	0.3186	9.7000e-004	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290			96.4654	96.4654	2.3300e-003	96.5236	
Total	0.0496	0.1577	0.3429	1.3300e-003	0.1149	1.0700e-003	0.1160	0.0306	1.0100e-003	0.0316			134.6307	134.6307	4.3200e-003		134.7387

3.3 Demolition - 2021

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/day										lb/day						
Fugitive Dust					8.0471	0.0000	8.0471	1.2184	0.0000	1.2184			0.0000			0.0000	
Off-Road	6.6457	60.6680	45.9880	0.1319		2.5335	2.5335		2.3308	2.3308			12,769.11	12,769.112	4.1298		12,872.35
Total	6.6457	60.6680	45.9880	0.1319	8.0471	2.5335	10.5806	1.2184	2.3308	3.5492			12,769.11	12,769.112	4.1298		12,872.35

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	lb/day										lb/day						
Hauling	0.3028	10.0616	1.9516	0.0288	0.6513	0.0309	0.6822	0.1786	0.0296	0.2082			3,066.657	3,066.6576	0.1599		3,070.655
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	
Worker	0.1163	0.0824	0.8088	2.4600e-003	0.2711	1.7500e-003	0.2728	0.0719	1.6200e-003	0.0735			244.8738	244.8738	5.9100e-003		245.0215
Total	0.4191	10.1440	2.7604	0.0313	0.9224	0.0327	0.9551	0.2505	0.0312	0.2817			3,311.531	3,311.5314	0.1658		3,315.676
													4				7

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/day										lb/day						
Fugitive Dust					3.6212	0.0000	3.6212	0.5483	0.0000	0.5483			0.0000			0.0000	
Off-Road	6.6457	60.6680	45.9880	0.1319	2.5335	2.5335		2.3308	2.3308	0.0000	12,769.11 25	12,769.11 5	4.1298			12,872.35 72	
Total	6.6457	60.6680	45.9880	0.1319	3.6212	2.5335	6.1547	0.5483	2.3308	2.8791	0.0000	12,769.11 25	12,769.112 5	4.1298			12,872.35 72

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/day										lb/day					
Hauling	0.3028	10.0616	1.9516	0.0288	0.6513	0.0309	0.6822	0.1786	0.0296	0.2082	3,066.657 6	3,066.6576	0.1599			3,070.655 2
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	0.1163	0.0824	0.8088	2.4600e-003	0.2711	1.7500e-003	0.2728	0.0719	1.6200e-003	0.0735	244.8738	244.8738	5.9100e-003			245.0215
Total	0.4191	10.1440	2.7604	0.0313	0.9224	0.0327	0.9551	0.2505	0.0312	0.2817	3,311.531 4	3,311.5314	0.1658			3,315.676 7

3.4 Grading - 2021

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/day										lb/day					
Fugitive Dust					3.1854	0.0000	3.1854	0.3441	0.0000	0.3441			0.0000			0.0000
Off-Road	2.8792	34.2833	18.5193	0.0448		1.2838	1.2838		1.1811	1.1811	4,342.279 5	4,342.2795	1.4044			4,377.389 0
Total	2.8792	34.2833	18.5193	0.0448	3.1854	1.2838	4.4692	0.3441	1.1811	1.5252	4,342.279 5	4,342.2795	1.4044			4,377.389 0

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	lb/day											lb/day					
Hauling	0.0348	1.1557	0.2242	3.3100e-003	0.0748	3.5500e-003	0.0784	0.0205	3.4000e-003	0.0239			352.2310	352.2310	0.0184		352.6901
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
Worker	0.0458	0.0325	0.3186	9.7000e-004	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290			96.4654	96.4654	2.3300e-003		96.5236
Total	0.0806	1.1881	0.5428	4.2800e-003	0.1816	4.2400e-003	0.1858	0.0488	4.0400e-003	0.0529			448.6964	448.6964	0.0207		449.2137

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/day											lb/day					
Fugitive Dust					1.4334	0.0000	1.4334	0.1549	0.0000	0.1549			0.0000			0.0000	
Off-Road	2.8792	34.2833	18.5193	0.0448		1.2838	1.2838		1.1811	1.1811	0.0000	4,342.2795	4,342.2795	1.4044		4,377.3890	
Total	2.8792	34.2833	18.5193	0.0448	1.4334	1.2838	2.7172	0.1549	1.1811	1.3360	0.0000	4,342.2795	4,342.2795	1.4044		4,377.3890	

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/day											lb/day					
Hauling	0.0348	1.1557	0.2242	3.3100e-003	0.0748	3.5500e-003	0.0784	0.0205	3.4000e-003	0.0239			352.2310	352.2310	0.0184		352.6901
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
Worker	0.0458	0.0325	0.3186	9.7000e-004	0.1068	6.9000e-004	0.1075	0.0283	6.4000e-004	0.0290			96.4654	96.4654	2.3300e-003		96.5236
Total	0.0806	1.1881	0.5428	4.2800e-003	0.1816	4.2400e-003	0.1858	0.0488	4.0400e-003	0.0529			448.6964	448.6964	0.0207		449.2137

3.5 Building Construction - 2021

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/day										lb/day					
Off-Road	1.6210	10.7821	11.1074	0.0179		0.4970	0.4970		0.4813	0.4813	0.0000	1,570.2373	1,570.2373	0.3447		1,578.8555
Total	1.6210	10.7821	11.1074	0.0179		0.4970	0.4970		0.4813	0.4813	0.0000	1,570.2373	1,570.2373	0.3447		1,578.8555

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	lb/day										lb/day					
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
Vendor	0.2464	8.2157	1.8866	0.0207	0.5217	0.0175	0.5392	0.1502	0.0167	0.1669	0.0000	2,187.6670	2,187.6670	0.1289		2,190.8896
Worker	0.6520	0.4620	4.5342	0.0138	1.5197	9.8300e-003	1.5296	0.4031	9.0600e-003	0.4122	0.0000	1,372.7774	1,372.7774	0.0331		1,373.6054
Total	0.8984	8.6776	6.4208	0.0345	2.0415	0.0273	2.0688	0.5533	0.0258	0.5791	0.0000	3,560.4444	3,560.4444	0.1620		3,564.4950

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/day										lb/day					
Off-Road	1.6210	10.7821	11.1074	0.0179		0.4970	0.4970		0.4813	0.4813	0.0000	1,570.2373	1,570.2373	0.3447		1,578.8555
Total	1.6210	10.7821	11.1074	0.0179		0.4970	0.4970		0.4813	0.4813	0.0000	1,570.2373	1,570.2373	0.3447		1,578.8555

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/day											lb/day					
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	0.2464	8.2157	1.8866	0.0207	0.5217	0.0175	0.5392	0.1502	0.0167	0.1669	2,187.667	2,187.6670	0.1289	2,190.889	6		
Worker	0.6520	0.4620	4.5342	0.0138	1.5197	9.8300e-003	1.5296	0.4031	9.0600e-003	0.4122	1,372.777	1,372.7774	0.0331	1,373.605	4		
Total	0.8984	8.6776	6.4208	0.0345	2.0415	0.0273	2.0688	0.5533	0.0258	0.5791	3,560.444	3,560.4444	0.1620	3,564.495	0		

3.6 Paving - 2021

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/day											lb/day					
Off-Road	0.5647	5.6399	5.8378	8.7700e-003		0.3223	0.3223		0.2968	0.2968	844.8670	844.8670	0.2705	851.6289			
Paving	0.4716					0.0000	0.0000		0.0000	0.0000		0.0000		0.0000			
Total	1.0363	5.6399	5.8378	8.7700e-003		0.3223	0.3223		0.2968	0.2968		844.8670	844.8670	0.2705	851.6289		

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	lb/day											lb/day					
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	0.0352	0.0250	0.2451	7.4000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223	74.2042	74.2042	1.7900e-003	74.2489			
Total	0.0352	0.0250	0.2451	7.4000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223		74.2042	74.2042	1.7900e-003		74.2489	

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/day										lb/day					
Off-Road	0.5647	5.6399	5.8378	8.7700e-003		0.3223	0.3223		0.2968	0.2968	0.0000	844.8670	844.8670	0.2705		851.6289
Paving	0.4716					0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000
Total	1.0363	5.6399	5.8378	8.7700e-003		0.3223	0.3223		0.2968	0.2968	0.0000	844.8670	844.8670	0.2705		851.6289

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/day										lb/day					
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	0.0352	0.0250	0.2451	7.4000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223	74.2042	74.2042	1.7900e-003			74.2489
Total	0.0352	0.0250	0.2451	7.4000e-004	0.0822	5.3000e-004	0.0827	0.0218	4.9000e-004	0.0223	74.2042	74.2042	1.7900e-003			74.2489

3.7 Architectural Coating - 2021

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/day										lb/day					
Archit. Coating	21.9004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
Off-Road	0.4963	5.7392	3.1138	7.3700e-003		0.2445	0.2445		0.2249	0.2249	714.0641	714.0641	0.2309			719.8377
Total	22.3967	5.7392	3.1138	7.3700e-003		0.2445	0.2445		0.2249	0.2249	714.0641	714.0641	0.2309			719.8377

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	lb/day											lb/day					
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	0.1304	0.0924	0.9069	2.7600e-003	0.3040	1.9700e-003	0.3059	0.0806	1.8100e-003	0.0824	274.5555	274.5555	6.6200e-003	274.7211			
Total	0.1304	0.0924	0.9069	2.7600e-003	0.3040	1.9700e-003	0.3059	0.0806	1.8100e-003	0.0824	274.5555	274.5555	6.6200e-003		274.7211		

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/day											lb/day					
Archit. Coating	21.9004						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.4963	5.7392	3.1138	7.3700e-003		0.2445	0.2445		0.2249	0.2249	0.0000	714.0641	714.0641	0.2309		719.8377	
Total	22.3967	5.7392	3.1138	7.3700e-003		0.2445	0.2445		0.2249	0.2249	0.0000	714.0641	714.0641	0.2309		719.8377	

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/day											lb/day					
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	0.1304	0.0924	0.9069	2.7600e-003	0.3040	1.9700e-003	0.3059	0.0806	1.8100e-003	0.0824	274.5555	274.5555	6.6200e-003	274.7211			
Total	0.1304	0.0924	0.9069	2.7600e-003	0.3040	1.9700e-003	0.3059	0.0806	1.8100e-003	0.0824	274.5555	274.5555	6.6200e-003		274.7211		

10x Genomics Redevelopment Project - Phase 2 Construction - Alameda County, Annual

10x Genomics Redevelopment Project - Phase 2 Construction
Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	63.25	1000sqft	0.36	63,250.00	0
Research & Development	51.75	1000sqft	0.30	51,750.00	0
Unenclosed Parking with Elevator	1,168.00	Space	1.35	354,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 4

Demolition - CalEEMod Note 6

Vehicle Trips - CalEEMod Note 7

Consumer Products - CalEEMod Note 7

Area Coating - CalEEMod Note 7

Energy Use - CalEEMod Note 7

Water And Wastewater - CalEEMod Note 7

Solid Waste - CalEEMod Note 7

Construction Off-road Equipment Mitigation - CalEEMod Note 8

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	90.00
tblConstructionPhase	NumDays	220.00	110.00
tblConstructionPhase	NumDays	20.00	24.00
tblConstructionPhase	NumDays	10.00	35.00
tblConsumerProducts	ROG_EF	2.14E-05	1E-20
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-20
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-18
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	NT24E	7.84	0.00
tblEnergyUse	NT24E	3.70	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	NT24NG	6.67	0.00
tblEnergyUse	T24E	6.11	0.00
tblEnergyUse	T24E	1.48	0.00
tblEnergyUse	T24NG	16.31	0.00
tblEnergyUse	T24NG	19.71	0.00
tblLandUse	LandUseSquareFeet	467,200.00	354,000.00
tblLandUse	LotAcreage	1.45	0.36
tblLandUse	LotAcreage	1.19	0.30
tblLandUse	LotAcreage	10.51	1.35
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	7.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblSolidWaste	SolidWasteGenerationRate	58.82	0.00
tblSolidWaste	SolidWasteGenerationRate	3.93	0.00
tblTripsAndVMT	WorkerTripNumber	33.00	40.00
tblTripsAndVMT	WorkerTripNumber	10.00	13.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblWater	IndoorWaterUseRate	11,241,659.56	0.00
tblWater	IndoorWaterUseRate	25,445,161.77	0.00
tblWater	OutdoorWaterUseRate	6,890,049.41	0.00

2.0 Emissions Summary

2.1 Overall Construction

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	tons/yr										MT/yr					
2021	0.1032	0.9948	0.7155	2.3600e-003	0.1224	0.0348	0.1572	0.0217	0.0322	0.0539	0.0000	210.8757	210.8757	0.0500	0.0000	212.1262
2022	0.8145	1.1800	1.0678	3.1000e-003	0.1085	0.0358	0.1442	0.0294	0.0339	0.0633	0.0000	274.9349	274.9349	0.0348	0.0000	275.8045
Maximum	0.8145	1.1800	1.0678	3.1000e-003	0.1224	0.0358	0.1572	0.0294	0.0339	0.0633	0.0000	274.9349	274.9349	0.0500	0.0000	275.8045

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	tons/yr										MT/yr					
2021	0.1032	0.9948	0.7155	2.3600e-003	0.0694	0.0348	0.1042	0.0137	0.0322	0.0458	0.0000	210.8755	210.8755	0.0500	0.0000	212.1261
2022	0.8145	1.1800	1.0678	3.1000e-003	0.1085	0.0358	0.1442	0.0294	0.0339	0.0633	0.0000	274.9348	274.9348	0.0348	0.0000	275.8043
Maximum	0.8145	1.1800	1.0678	3.1000e-003	0.1085	0.0358	0.1442	0.0294	0.0339	0.0633	0.0000	274.9348	274.9348	0.0500	0.0000	275.8043

	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	0.00	0.00	0.00	0.00	22.94	0.00	17.57	15.70	0.00	6.84	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-9-2021	2-8-2022	1.6199	1.6199
2	2-9-2022	5-8-2022	1.3395	1.3395
3	5-9-2022	8-8-2022	0.0732	0.0732
		Highest	1.6199	1.6199

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	11/9/2021	12/10/2021	5	24	
2	Building Construction	Building Construction	12/11/2021	5/13/2022	5	110	
3	Paving	Paving	1/10/2022	2/25/2022	5	35	
4	Architectural Coating	Architectural Coating	1/10/2022	5/13/2022	5	90	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.35

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 172,500; Non-Residential Outdoor: 57,500; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Off-Highway Trucks	8	8.00	402	0.38
Demolition	Other Construction Equipment	4	8.00	172	0.42
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Sweepers/Scrubbers	1	4.00	64	0.46
Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cement and Mortar Mixers	1	2.00	9	0.56
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Sweepers/Scrubbers	1	4.00	64	0.46

Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	2.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Sweepers/Scrubbers	1	4.00	64	0.46
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Aerial Lifts	2	2.00	63	0.31
Architectural Coating	Air Compressors	0	6.00	78	0.48
Architectural Coating	Cranes	1	8.00	231	0.29
Architectural Coating	Forklifts	1	4.00	89	0.20

Trips and VMT

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	13	40.00	0.00	890.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	185.00	77.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	37.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

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					0.0963	0.0000	0.0963	0.0146	0.0000	0.0146	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0797	0.7279	0.5524	1.5800e-003		0.0304	0.0304		0.0280	0.0280	0.0000	138.7489	138.7489	0.0449	0.0000	139.8707	
Total	0.0797	0.7279	0.5524	1.5800e-003	0.0963	0.0304	0.1267	0.0146	0.0280	0.0426	0.0000	138.7489	138.7489	0.0449	0.0000	139.8707	

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	3.5700e-003	0.1200	0.0223	3.5000e-004	7.5400e-004	3.7000e-004	7.9000e-003	2.0700e-003	3.5000e-004	2.4200e-003	0.0000	33.6438	33.6438	1.6700e-003	0.0000	33.6855	
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	1.5300e-003	1.0900e-003	0.0114	4.0000e-005	3.8000e-003	3.0000e-005	3.8200e-003	1.0100e-003	2.0000e-005	1.0300e-003	0.0000	3.2567	3.2567	8.0000e-005	0.0000	3.2586	
Total	5.1000e-003	0.1211	0.0337	3.9000e-004	0.0113	4.0000e-004	0.0117	3.0800e-003	3.7000e-004	3.4500e-003	0.0000	36.9005	36.9005	1.7500e-003	0.0000	36.9441	

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					0.0433	0.0000	0.0433	6.5600e-003	0.0000	6.5600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0797	0.7279	0.5524	1.5800e-003		0.0304	0.0304		0.0280	0.0280	0.0000	138.7487	138.7487	0.0449	0.0000	139.8706	
Total	0.0797	0.7279	0.5524	1.5800e-003	0.0433	0.0304	0.0738	6.5600e-003	0.0280	0.0346	0.0000	138.7487	138.7487	0.0449	0.0000	139.8706	

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	3.5700e-003	0.1200	0.0223	3.5000e-004	7.5400e-003	3.7000e-004	7.9000e-003	2.0700e-003	3.5000e-004	2.4200e-003	0.0000	33.6438	33.6438	1.6700e-003	0.0000	33.6855	
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	1.5300e-003	1.0900e-003	0.0114	4.0000e-005	3.8000e-003	3.0000e-005	3.8200e-003	1.0100e-003	2.0000e-005	1.0300e-003	0.0000	3.2567	3.2567	8.0000e-005	0.0000	3.2586	
Total	5.1000e-003	0.1211	0.0337	3.9000e-004	0.0113	4.0000e-004	0.0117	3.0800e-003	3.7000e-004	3.4500e-003	0.0000	36.9005	36.9005	1.7500e-003	0.0000	36.9441	

3.3 Building Construction - 2021

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	0.0122	0.0809	0.0833	1.3000e-004		3.7300e-003	3.7300e-003		3.6100e-003	3.6100e-003	0.0000	10.6837	10.6837	2.3500e-003	0.0000	10.7424	
Total	0.0122	0.0809	0.0833	1.3000e-004		3.7300e-003	3.7300e-003		3.6100e-003	3.6100e-003	0.0000	10.6837	10.6837	2.3500e-003	0.0000	10.7424	

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	1.7900e-003	0.0618	0.0131	1.6000e-004	3.7900e-003	1.3000e-004	3.9200e-003	1.1000e-003	1.2000e-004	1.2200e-003	0.0000	15.1288	15.1288	8.3000e-004	0.0000	15.1496	
Worker	4.4300e-003	3.1600e-003	0.0331	1.0000e-004	0.0110	7.0000e-005	0.0110	2.9200e-003	7.0000e-005	2.9900e-003	0.0000	9.4138	9.4138	2.2000e-004	0.0000	9.4194	
Total	6.2200e-003	0.0649	0.0462	2.6000e-004	0.0148	2.0000e-004	0.0150	4.0200e-003	1.9000e-004	4.2100e-003	0.0000	24.5426	24.5426	1.0500e-003	0.0000	24.5690	

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	0.0122	0.0809	0.0833	1.3000e-004		3.7300e-003	3.7300e-003		3.6100e-003	3.6100e-003	0.0000	10.6837	10.6837	2.3500e-003	0.0000	10.7423	
Total	0.0122	0.0809	0.0833	1.3000e-004		3.7300e-003	3.7300e-003		3.6100e-003	3.6100e-003	0.0000	10.6837	10.6837	2.3500e-003	0.0000	10.7423	

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	1.7900e-003	0.0618	0.0131	1.6000e-004	3.7900e-003	1.3000e-004	3.9200e-003	1.1000e-003	1.2000e-004	1.2200e-003	0.0000	15.1288	15.1288	8.3000e-004	0.0000	15.1496	
Worker	4.4300e-003	3.1600e-003	0.0331	1.0000e-004	0.0110	7.0000e-005	0.0110	2.9200e-003	7.0000e-005	2.9900e-003	0.0000	9.4138	9.4138	2.2000e-004	0.0000	9.4194	
Total	6.2200e-003	0.0649	0.0462	2.6000e-004	0.0148	2.0000e-004	0.0150	4.0200e-003	1.9000e-004	4.2100e-003	0.0000	24.5426	24.5426	1.0500e-003	0.0000	24.5690	

3.3 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	0.0702	0.4777	0.5203	8.5000e-004		0.0203	0.0203		0.0197	0.0197	0.0000	67.6655	67.6655	0.0145	0.0000	68.0275	
Total	0.0702	0.4777	0.5203	8.5000e-004		0.0203	0.0203		0.0197	0.0197	0.0000	67.6655	67.6655	0.0145	0.0000	68.0275	

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	0.0106	0.3716	0.0776	9.9000e-004	0.0240	7.1000e-004	0.0247	6.9500e-003	6.7000e-004	7.6200e-003	0.0000	94.8788	94.8788	5.0300e-003	0.0000	95.0046	
Worker	0.0261	0.0179	0.1917	6.4000e-004	0.0695	4.5000e-004	0.0699	0.0185	4.2000e-004	0.0189	0.0000	57.4480	57.4480	1.2800e-003	0.0000	57.4799	
Total	0.0366	0.3895	0.2694	1.6300e-003	0.0935	1.1600e-003	0.0947	0.0254	1.0900e-003	0.0265	0.0000	152.3268	152.3268	6.3100e-003	0.0000	152.4845	

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	0.0702	0.4777	0.5203	8.5000e-004			0.0203	0.0203		0.0197	0.0197	0.0000	67.6654	67.6654	0.0145	0.0000	68.0274
Total	0.0702	0.4777	0.5203	8.5000e-004			0.0203	0.0203		0.0197	0.0197	0.0000	67.6654	67.6654	0.0145	0.0000	68.0274

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	0.0106	0.3716	0.0776	9.9000e-004	0.0240	7.1000e-004	0.0247	6.9500e-003	6.7000e-004	7.6200e-003	0.0000	94.8788	94.8788	5.0300e-003	0.0000	95.0046	
Worker	0.0261	0.0179	0.1917	6.4000e-004	0.0695	4.5000e-004	0.0699	0.0185	4.2000e-004	0.0189	0.0000	57.4480	57.4480	1.2800e-003	0.0000	57.4799	
Total	0.0366	0.3895	0.2694	1.6300e-003	0.0935	1.1600e-003	0.0947	0.0254	1.0900e-003	0.0265	0.0000	152.3268	152.3268	6.3100e-003	0.0000	152.4845	

3.4 Paving - 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	8.4800e-003	0.0843	0.1012	1.5000e-004		4.6000e-003	4.6000e-003		4.2400e-003	4.2400e-003	0.0000	13.4163	13.4163	4.3000e-003	0.0000	13.5236	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	8.4800e-003	0.0843	0.1012	1.5000e-004		4.6000e-003	4.6000e-003		4.2400e-003	4.2400e-003	0.0000	13.4163	13.4163	4.3000e-003	0.0000	13.5236	

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	6.7000e-004	4.6000e-004	4.9600e-003	2.0000e-005	1.8000e-003	1.0000e-005	1.8100e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4873	1.4873	3.0000e-005	0.0000	1.4881	
Total	6.7000e-004	4.6000e-004	4.9600e-003	2.0000e-005	1.8000e-003	1.0000e-005	1.8100e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4873	1.4873	3.0000e-005	0.0000	1.4881	

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	8.4800e-003	0.0843	0.1012	1.5000e-004		4.6000e-003	4.6000e-003		4.2400e-003	4.2400e-003	0.0000	13.4162	13.4162	4.3000e-003	0.0000	13.5236	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	8.4800e-003	0.0843	0.1012	1.5000e-004		4.6000e-003	4.6000e-003		4.2400e-003	4.2400e-003	0.0000	13.4162	13.4162	4.3000e-003	0.0000	13.5236	

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	6.7000e-004	4.6000e-004	4.9600e-003	2.0000e-005	1.8000e-003	1.0000e-005	1.8100e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4873	1.4873	3.0000e-005	0.0000	1.4881	
Total	6.7000e-004	4.6000e-004	4.9600e-003	2.0000e-005	1.8000e-003	1.0000e-005	1.8100e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4873	1.4873	3.0000e-005	0.0000	1.4881	

3.5 Architectural Coating - 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					
Archit. Coating	0.6735						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0202	0.2246	0.1357	3.3000e-004		9.6200e-003	9.6200e-003		8.8500e-003	8.8500e-003	0.0000	29.1542	29.1542	9.4300e-003	0.0000	29.3899	
Total	0.6936	0.2246	0.1357	3.3000e-004		9.6200e-003	9.6200e-003		8.8500e-003	8.8500e-003	0.0000	29.1542	29.1542	9.4300e-003	0.0000	29.3899	

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	4.9400e-003	3.3900e-003	0.0363	1.2000e-004	0.0132	9.0000e-005	0.0133	3.5000e-003	8.0000e-005	3.5800e-003	0.0000	10.8849	10.8849	2.4000e-004	0.0000	10.8909	
Total	4.9400e-003	3.3900e-003	0.0363	1.2000e-004	0.0132	9.0000e-005	0.0133	3.5000e-003	8.0000e-005	3.5800e-003	0.0000	10.8849	10.8849	2.4000e-004	0.0000	10.8909	

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	0.6735						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0202	0.2246	0.1357	3.3000e-004			9.6200e-003	9.6200e-003		8.8500e-003	8.8500e-003	0.0000	29.1542	29.1542	9.4300e-003	0.0000	29.3899
Total	0.6936	0.2246	0.1357	3.3000e-004			9.6200e-003	9.6200e-003		8.8500e-003	8.8500e-003	0.0000	29.1542	29.1542	9.4300e-003	0.0000	29.3899

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	4.9400e-003	3.3900e-003	0.0363	1.2000e-004	0.0132	9.0000e-005	0.0133	3.5000e-003	8.0000e-005	3.5800e-003	0.0000	10.8849	10.8849	2.4000e-004	0.0000	10.8909	
Total	4.9400e-003	3.3900e-003	0.0363	1.2000e-004	0.0132	9.0000e-005	0.0133	3.5000e-003	8.0000e-005	3.5800e-003	0.0000	10.8849	10.8849	2.4000e-004	0.0000	10.8909	

10x Genomics Redevelopment Project - Phase 2 Construction - Alameda County, Summer

10x Genomics Redevelopment Project - Phase 2 Construction

Alameda County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	63.25	1000sqft	0.36	63,250.00	0
Research & Development	51.75	1000sqft	0.30	51,750.00	0
Unenclosed Parking with Elevator	1,168.00	Space	1.35	354,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 4

Demolition - CalEEMod Note 6

Vehicle Trips - CalEEMod Note 7

Consumer Products - CalEEMod Note 7

Area Coating - CalEEMod Note 7

Energy Use - CalEEMod Note 7

Water And Wastewater - CalEEMod Note 7

Solid Waste - CalEEMod Note 7

Construction Off-road Equipment Mitigation - CalEEMod Note 8

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	90.00
tblConstructionPhase	NumDays	220.00	110.00
tblConstructionPhase	NumDays	20.00	24.00
tblConstructionPhase	NumDays	10.00	35.00
tblConsumerProducts	ROG_EF	2.14E-05	1E-20
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-20
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-18
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	NT24E	7.84	0.00
tblEnergyUse	NT24E	3.70	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	NT24NG	6.67	0.00
tblEnergyUse	T24E	6.11	0.00
tblEnergyUse	T24E	1.48	0.00
tblEnergyUse	T24NG	16.31	0.00
tblEnergyUse	T24NG	19.71	0.00
tblLandUse	LandUseSquareFeet	467,200.00	354,000.00
tblLandUse	LotAcreage	1.45	0.36
tblLandUse	LotAcreage	1.19	0.30
tblLandUse	LotAcreage	10.51	1.35
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	7.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblSolidWaste	SolidWasteGenerationRate	58.82	0.00
tblSolidWaste	SolidWasteGenerationRate	3.93	0.00
tblTripsAndVMT	WorkerTripNumber	33.00	40.00
tblTripsAndVMT	WorkerTripNumber	10.00	13.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblWater	IndoorWaterUseRate	11,241,659.56	0.00
tblWater	IndoorWaterUseRate	25,445,161.77	0.00
tblWater	OutdoorWaterUseRate	6,890,049.41	0.00

2.0 Emissions Summary

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/day										lb/day						
2021	7.0698	70.5504	48.8633	0.1642	9.0025	2.5690	11.5714	1.4802	2.3646	3.8448	0.0000	16,182.6479	16,182.6479	4.2783	0.0000	16,289.6051	
2022	18.3300	28.0422	26.8870	0.0735	2.4522	0.9308	3.3830	0.6623	0.8779	1.5402	0.0000	7,183.1018	7,183.1018	0.9895	0.0000	7,207.8397	
Maximum	18.3300	70.5504	48.8633	0.1642	9.0025	2.5690	11.5714	1.4802	2.3646	3.8448	0.0000	16,182.6479	16,182.6479	4.2783	0.0000	16,289.6051	

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						
2021	7.0698	70.5504	48.8633	0.1642	4.5889	2.5690	7.1579	0.8119	2.3646	3.1765	0.0000	16,182.6478	16,182.6478	4.2783	0.0000	16,289.6051	
2022	18.3300	28.0422	26.8870	0.0735	2.4522	0.9308	3.3830	0.6623	0.8779	1.5402	0.0000	7,183.1018	7,183.1018	0.9895	0.0000	7,207.8397	
Maximum	18.3300	70.5504	48.8633	0.1642	4.5889	2.5690	7.1579	0.8119	2.3646	3.1765	0.0000	16,182.6478	16,182.6478	4.2783	0.0000	16,289.6051	

	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	0.00	0.00	0.00	0.00	38.53	0.00	29.51	31.19	0.00	12.41	0.00	0.00	0.00	0.00	0.00	0.00

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	11/9/2021	12/10/2021	5	24	
2	Building Construction	Building Construction	12/11/2021	5/13/2022	5	110	
3	Paving	Paving	1/10/2022	2/25/2022	5	35	
4	Architectural Coating	Architectural Coating	1/10/2022	5/13/2022	5	90	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.35

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 172,500; Non-Residential Outdoor: 57,500; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Off-Highway Trucks	8	8.00	402	0.38
Demolition	Other Construction Equipment	4	8.00	172	0.42
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Sweepers/Scrubbers	1	4.00	64	0.46
Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cement and Mortar Mixers	1	2.00	9	0.56
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74

Building Construction	Sweepers/Scrubbers	1	4.00	64	0.46
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	2.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Sweepers/Scrubbers	1	4.00	64	0.46
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Aerial Lifts	2	2.00	63	0.31
Architectural Coating	Air Compressors	0	6.00	78	0.48
Architectural Coating	Cranes	1	8.00	231	0.29
Architectural Coating	Forklifts	1	4.00	89	0.20

Trips and VMT

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	13	40.00	0.00	890.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	185.00	77.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	37.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

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/day										lb/day						
Fugitive Dust					8.0246	0.0000	8.0246	1.2150	0.0000	1.2150			0.0000			0.0000	
Off-Road	6.6410	60.6593	46.0308	0.1316		2.5365	2.5365		2.3336	2.3336		12,745.3700	12,745.3700	4.1221			12,848.4228
Total	6.6410	60.6593	46.0308	0.1316	8.0246	2.5365	10.5611	1.2150	2.3336	3.5486			12,745.3700	12,745.3700	4.1221		12,848.4228

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	lb/day										lb/day						
Hauling	0.2937	9.8108	1.7905	0.0293	0.6492	0.0304	0.6796	0.1780	0.0290	0.2071	3,114.7269	3,114.7269	0.1485			3,118.4398	
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	
Worker	0.1351	0.0803	1.0420	3.2400e-003	0.3286	2.1300e-003	0.3307	0.0872	1.9600e-003	0.0891	322.5510	322.5510	7.6600e-003			322.7425	
Total	0.4288	9.8911	2.8325	0.0325	0.9778	0.0325	1.0103	0.2652	0.0310	0.2962			3,437.2779	3,437.2779	0.1562		3,441.1824

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/day										lb/day						
Fugitive Dust					3.6111	0.0000	3.6111	0.5468	0.0000	0.5468			0.0000			0.0000	
Off-Road	6.6410	60.6593	46.0308	0.1316		2.5365	2.5365		2.3336	2.3336	0.0000	12,745.3700	12,745.3700	4.1221			12,848.4227
Total	6.6410	60.6593	46.0308	0.1316	3.6111	2.5365	6.1476	0.5468	2.3336	2.8803	0.0000	12,745.3700	12,745.3700	4.1221		12,848.4227	

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/day										lb/day						
Hauling	0.2937	9.8108	1.7905	0.0293	0.6492	0.0304	0.6796	0.1780	0.0290	0.2071	3,114.726 9	3,114.7269	0.1485			3,118.439 8	
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	0.1351	0.0803	1.0420	3.2400e-003	0.3286	2.1300e-003	0.3307	0.0872	1.9600e-003	0.0891	322.5510	322.5510	7.6600e-003			322.7425	
Total	0.4288	9.8911	2.8325	0.0325	0.9778	0.0325	1.0103	0.2652	0.0310	0.2962	3,437.277 9	3,437.2779	0.1562			3,441.182 4	

3.3 Building Construction - 2021

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/day										lb/day						
Off-Road	1.6210	10.7821	11.1074	0.0179		0.4970	0.4970		0.4813	0.4813	1,570.237 3	1,570.2373	0.3447			1,578.855 5	
Total	1.6210	10.7821	11.1074	0.0179		0.4970	0.4970		0.4813	0.4813	1,570.237 3	1,570.2373	0.3447			1,578.855 5	

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	lb/day										lb/day						
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	0.2329	8.1558	1.6207	0.0213	0.5217	0.0170	0.5387	0.1502	0.0162	0.1664	2,249.558 3	2,249.5583	0.1168			2,252.479 0	
Worker	0.6250	0.3716	4.8192	0.0150	1.5197	9.8300e-003	1.5296	0.4031	9.0600e-003	0.4122	1,491.798 4	1,491.7984	0.0354			1,492.684 2	
Total	0.8578	8.5273	6.4399	0.0363	2.0415	0.0268	2.0683	0.5533	0.0253	0.5786	3,741.356 7	3,741.3567	0.1523			3,745.163 2	

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/day											lb/day					
Off-Road	1.6210	10.7821	11.1074	0.0179		0.4970	0.4970		0.4813	0.4813	0.0000	1,570.237 3	1,570.2373	0.3447		1,578.855 5	
Total	1.6210	10.7821	11.1074	0.0179		0.4970	0.4970		0.4813	0.4813	0.0000	1,570.237 3	1,570.2373	0.3447		1,578.855 5	

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/day											lb/day					
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	
Vendor	0.2329	8.1558	1.6207	0.0213	0.5217	0.0170	0.5387	0.1502	0.0162	0.1664		2,249.558 3	2,249.5583	0.1168		2,252.479 0	
Worker	0.6250	0.3716	4.8192	0.0150	1.5197	9.8300e-003	1.5296	0.4031	9.0600e-003	0.4122		1,491.798 4	1,491.7984	0.0354		1,492.684 2	
Total	0.8578	8.5273	6.4399	0.0363	2.0415	0.0268	2.0683	0.5533	0.0253	0.5786		3,741.356 7	3,741.3567	0.1523		3,745.163 2	

3.3 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	lb/day											lb/day					
Off-Road	1.4769	10.0578	10.9530	0.0179		0.4271	0.4271		0.4136	0.4136		1,570.283 1	1,570.2831	0.3360		1,578.682 6	
Total	1.4769	10.0578	10.9530	0.0179		0.4271	0.4271		0.4136	0.4136		1,570.283 1	1,570.2831	0.3360		1,578.682 6	

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	lb/day										lb/day						
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	0.2177	7.7517	1.5185	0.0211	0.5218	0.0147	0.5364	0.1502	0.0140	0.1643	2,227.702	2,227.7028	0.1117	2,230.494	4		
Worker	0.5799	0.3327	4.4238	0.0144	1.5197	9.5800e-003	1.5293	0.4031	8.8200e-003	0.4119	1,437.395	1,437.3959	0.0318	1,438.190	1		
Total	0.7976	8.0844	5.9423	0.0355	2.0415	0.0242	2.0657	0.5533	0.0228	0.5762	3,665.098	3,665.0986	0.1434	3,668.684	5		

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/day										lb/day						
Off-Road	1.4769	10.0578	10.9530	0.0179		0.4271	0.4271		0.4136	0.4136	0.0000	1,570.283	1,570.2831	0.3360	1,578.682	6	
Total	1.4769	10.0578	10.9530	0.0179		0.4271	0.4271		0.4136	0.4136	0.0000	1,570.283	1,570.2831	0.3360	1,578.682	6	

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/day										lb/day						
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	0.2177	7.7517	1.5185	0.0211	0.5218	0.0147	0.5364	0.1502	0.0140	0.1643	2,227.702	2,227.7028	0.1117	2,230.494	4		
Worker	0.5799	0.3327	4.4238	0.0144	1.5197	9.5800e-003	1.5293	0.4031	8.8200e-003	0.4119	1,437.395	1,437.3959	0.0318	1,438.190	1		
Total	0.7976	8.0844	5.9423	0.0355	2.0415	0.0242	2.0657	0.5533	0.0228	0.5762	3,665.098	3,665.0986	0.1434	3,668.684	5		

3.4 Paving - 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	lb/day											lb/day					
Off-Road	0.4846	4.8183	5.7799	8.7800e-003			0.2630	0.2630		0.2423	0.2423		845.0790	845.0790	0.2705		851.8426
Paving	0.0000						0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000
Total	0.4846	4.8183	5.7799	8.7800e-003			0.2630	0.2630		0.2423	0.2423		845.0790	845.0790	0.2705		851.8426

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	lb/day											lb/day					
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	
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	
Worker	0.0408	0.0234	0.3109	1.0100e-003	0.1068	6.7000e-004	0.1075	0.0283	6.2000e-004	0.0290		101.0062	101.0062	2.2300e-003		101.0620	
Total	0.0408	0.0234	0.3109	1.0100e-003	0.1068	6.7000e-004	0.1075	0.0283	6.2000e-004	0.0290		101.0062	101.0062	2.2300e-003		101.0620	

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/day											lb/day					
Off-Road	0.4846	4.8183	5.7799	8.7800e-003			0.2630	0.2630		0.2423	0.2423	0.0000	845.0790	845.0790	0.2705		851.8426
Paving	0.0000						0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000
Total	0.4846	4.8183	5.7799	8.7800e-003			0.2630	0.2630		0.2423	0.2423	0.0000	845.0790	845.0790	0.2705		851.8426

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/day										lb/day						
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	0.0408	0.0234	0.3109	1.0100e-003	0.1068	6.7000e-004	0.1075	0.0283	6.2000e-004	0.0290	101.0062	101.0062	2.2300e-003	101.0620			
Total	0.0408	0.0234	0.3109	1.0100e-003	0.1068	6.7000e-004	0.1075	0.0283	6.2000e-004	0.0290		101.0062	101.0062	2.2300e-003		101.0620	

3.5 Architectural Coating - 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	lb/day										lb/day						
Archit. Coating	14.9664						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.4478	4.9919	3.0162	7.3700e-003		0.2139	0.2139		0.1968	0.1968		714.1557	714.1557	0.2310		719.9300	
Total	15.4142	4.9919	3.0162	7.3700e-003		0.2139	0.2139		0.1968	0.1968		714.1557	714.1557	0.2310		719.9300	

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	lb/day										lb/day						
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	0.1160	0.0666	0.8848	2.8800e-003	0.3040	1.9200e-003	0.3059	0.0806	1.7600e-003	0.0824	287.4792	287.4792	6.3500e-003	287.6380			
Total	0.1160	0.0666	0.8848	2.8800e-003	0.3040	1.9200e-003	0.3059	0.0806	1.7600e-003	0.0824		287.4792	287.4792	6.3500e-003		287.6380	

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/day										lb/day					
Archit. Coating	14.9664						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.4478	4.9919	3.0162	7.3700e-003		0.2139	0.2139		0.1968	0.1968	0.0000	714.1557	714.1557	0.2310		719.9300
Total	15.4142	4.9919	3.0162	7.3700e-003		0.2139	0.2139		0.1968	0.1968	0.0000	714.1557	714.1557	0.2310		719.9300

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/day										lb/day					
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
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
Worker	0.1160	0.0666	0.8848	2.8800e-003	0.3040	1.9200e-003	0.3059	0.0806	1.7600e-003	0.0824		287.4792	287.4792	6.3500e-003		287.6380
Total	0.1160	0.0666	0.8848	2.8800e-003	0.3040	1.9200e-003	0.3059	0.0806	1.7600e-003	0.0824		287.4792	287.4792	6.3500e-003		287.6380

10x Genomics Redevelopment Project - Phase 2 Construction - Alameda County, Winter

10x Genomics Redevelopment Project - Phase 2 Construction

Alameda County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	63.25	1000sqft	0.36	63,250.00	0
Research & Development	51.75	1000sqft	0.30	51,750.00	0
Unenclosed Parking with Elevator	1,168.00	Space	1.35	354,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 4

Demolition - CalEEMod Note 6

Vehicle Trips - CalEEMod Note 7

Consumer Products - CalEEMod Note 7

Area Coating - CalEEMod Note 7

Energy Use - CalEEMod Note 7

Water And Wastewater - CalEEMod Note 7

Solid Waste - CalEEMod Note 7

Construction Off-road Equipment Mitigation - CalEEMod Note 8

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	90.00
tblConstructionPhase	NumDays	220.00	110.00
tblConstructionPhase	NumDays	20.00	24.00
tblConstructionPhase	NumDays	10.00	35.00
tblConsumerProducts	ROG_EF	2.14E-05	1E-20
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-20
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-18
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	LightingElect	1.75	0.00
tblEnergyUse	NT24E	7.84	0.00
tblEnergyUse	NT24E	3.70	0.00
tblEnergyUse	NT24E	0.19	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	NT24NG	6.67	0.00
tblEnergyUse	T24E	6.11	0.00
tblEnergyUse	T24E	1.48	0.00
tblEnergyUse	T24NG	16.31	0.00
tblEnergyUse	T24NG	19.71	0.00
tblLandUse	LandUseSquareFeet	467,200.00	354,000.00
tblLandUse	LotAcreage	1.45	0.36
tblLandUse	LotAcreage	1.19	0.30
tblLandUse	LotAcreage	10.51	1.35
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	UsageHours	8.00	2.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	7.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblSolidWaste	SolidWasteGenerationRate	58.82	0.00
tblSolidWaste	SolidWasteGenerationRate	3.93	0.00
tblTripsAndVMT	WorkerTripNumber	33.00	40.00
tblTripsAndVMT	WorkerTripNumber	10.00	13.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblWater	IndoorWaterUseRate	11,241,659.56	0.00
tblWater	IndoorWaterUseRate	25,445,161.77	0.00
tblWater	OutdoorWaterUseRate	6,890,049.41	0.00

2.0 Emissions Summary

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/day										lb/day						
2021	7.0838	70.7892	48.9567	0.1634	9.0025	2.5695	11.5719	1.4802	2.3650	3.8452	0.0000	16,099.22	16,099.226	4.2887	0.0000	16,206.44	
											67	7				35	
2022	18.3756	28.1941	26.7818	0.0714	2.4522	0.9312	3.3835	0.6623	0.8783	1.5406	0.0000	6,975.849	6,975.8496	0.9983	0.0000	7,000.807	
											6					3	
Maximum	18.3756	70.7892	48.9567	0.1634	9.0025	2.5695	11.5719	1.4802	2.3650	3.8452	0.0000	16,099.22	16,099.226	4.2887	0.0000	16,206.44	
											67	7				35	

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						
2021	7.0838	70.7892	48.9567	0.1634	4.5889	2.5695	7.1584	0.8119	2.3650	3.1770	0.0000	16,099.22	16,099.226	4.2887	0.0000	16,206.44	
											67	7				35	
2022	18.3756	28.1941	26.7818	0.0714	2.4522	0.9312	3.3835	0.6623	0.8783	1.5406	0.0000	6,975.849	6,975.8495	0.9983	0.0000	7,000.807	
											5					3	
Maximum	18.3756	70.7892	48.9567	0.1634	4.5889	2.5695	7.1584	0.8119	2.3650	3.1770	0.0000	16,099.22	16,099.226	4.2887	0.0000	16,206.44	
											67	7				35	
	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	0.00	0.00	0.00	0.00	38.53	0.00	29.51	31.19	0.00	12.41	0.00	0.00	0.00	0.00	0.00	0.00	

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	11/9/2021	12/10/2021	5	24	
2	Building Construction	Building Construction	12/11/2021	5/13/2022	5	110	
3	Paving	Paving	1/10/2022	2/25/2022	5	35	
4	Architectural Coating	Architectural Coating	1/10/2022	5/13/2022	5	90	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.35

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 172,500; Non-Residential Outdoor: 57,500; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Off-Highway Trucks	8	8.00	402	0.38
Demolition	Other Construction Equipment	4	8.00	172	0.42
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Sweepers/Scrubbers	1	4.00	64	0.46
Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cement and Mortar Mixers	1	2.00	9	0.56
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	0	8.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Sweepers/Scrubbers	1	4.00	64	0.46

Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	2.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Sweepers/Scrubbers	1	4.00	64	0.46
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Aerial Lifts	2	2.00	63	0.31
Architectural Coating	Air Compressors	0	6.00	78	0.48
Architectural Coating	Cranes	1	8.00	231	0.29
Architectural Coating	Forklifts	1	4.00	89	0.20

Trips and VMT

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	13	40.00	0.00	890.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	185.00	77.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	37.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2021

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/day										lb/day						
Fugitive Dust					8.0246	0.0000	8.0246	1.2150	0.0000	1.2150			0.0000			0.0000	
Off-Road	6.6410	60.6593	46.0308	0.1316	2.5365	2.5365		2.3336	2.3336		12,745.37 00	12,745.370 0	4.1221			12,848.42 28	
Total	6.6410	60.6593	46.0308	0.1316	8.0246	2.5365	10.5611	1.2150	2.3336	3.5486		12,745.37 00	12,745.370 0	4.1221			12,848.42 28

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	lb/day										lb/day					
Hauling	0.3018	10.0301	1.9455	0.0288	0.6492	0.0308	0.6801	0.1780	0.0295	0.2075		3,057.040 0	3,057.0400	0.1594		3,061.025 0
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
Worker	0.1410	0.0999	0.9804	2.9800e-003	0.3286	2.1300e-003	0.3307	0.0872	1.9600e-003	0.0891		296.8167	296.8167	7.1600e-003		296.9958
Total	0.4428	10.1300	2.9259	0.0317	0.9778	0.0330	1.0108	0.2652	0.0315	0.2967		3,353.856 7	3,353.8567	0.1666		3,358.020 7

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/day										lb/day						
Fugitive Dust					3.6111	0.0000	3.6111	0.5468	0.0000	0.5468			0.0000			0.0000	
Off-Road	6.6410	60.6593	46.0308	0.1316	2.5365	2.5365		2.3336	2.3336	0.0000	12,745.37 00	12,745.370 0	4.1221			12,848.42 27	
Total	6.6410	60.6593	46.0308	0.1316	3.6111	2.5365	6.1476	0.5468	2.3336	2.8803	0.0000	12,745.37 00	12,745.370 0	4.1221			12,848.42 27

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/day											lb/day					
Hauling	0.3018	10.0301	1.9455	0.0288	0.6492	0.0308	0.6801	0.1780	0.0295	0.2075	3,057.040 0	3,057.0400	0.1594		3,061.025 0		
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	0.1410	0.0999	0.9804	2.9800e-003	0.3286	2.1300e-003	0.3307	0.0872	1.9600e-003	0.0891	296.8167	296.8167	7.1600e-003		296.9958		
Total	0.4428	10.1300	2.9259	0.0317	0.9778	0.0330	1.0108	0.2652	0.0315	0.2967	3,353.856 7	3,353.8567	0.1666		3,358.020 7		

3.3 Building Construction - 2021

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/day											lb/day					
Off-Road	1.6210	10.7821	11.1074	0.0179		0.4970	0.4970		0.4813	0.4813	1,570.237 3	1,570.2373	0.3447		1,578.855 5		
Total	1.6210	10.7821	11.1074	0.0179		0.4970	0.4970		0.4813	0.4813	1,570.237 3	1,570.2373	0.3447		1,578.855 5		

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	lb/day											lb/day					
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	0.2464	8.2157	1.8866	0.0207	0.5217	0.0175	0.5392	0.1502	0.0167	0.1669	2,187.667 0	2,187.6670	0.1289		2,190.889 6		
Worker	0.6520	0.4620	4.5342	0.0138	1.5197	9.8300e-003	1.5296	0.4031	9.0600e-003	0.4122	1,372.777 4	1,372.7774	0.0331		1,373.605 4		
Total	0.8984	8.6776	6.4208	0.0345	2.0415	0.0273	2.0688	0.5533	0.0258	0.5791	3,560.444 4	3,560.4444	0.1620		3,564.495 0		

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/day											lb/day					
Off-Road	1.6210	10.7821	11.1074	0.0179			0.4970	0.4970		0.4813	0.4813	0.0000	1,570.2373	1,570.2373	0.3447		1,578.8555
Total	1.6210	10.7821	11.1074	0.0179			0.4970	0.4970		0.4813	0.4813	0.0000	1,570.2373	1,570.2373	0.3447		1,578.8555

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/day											lb/day					
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	
Vendor	0.2464	8.2157	1.8866	0.0207	0.5217	0.0175	0.5392	0.1502	0.0167	0.1669		2,187.6670	2,187.6670	0.1289		2,190.8896	
Worker	0.6520	0.4620	4.5342	0.0138	1.5197	9.8300e-003	1.5296	0.4031	9.0600e-003	0.4122		1,372.7774	1,372.7774	0.0331		1,373.6054	
Total	0.8984	8.6776	6.4208	0.0345	2.0415	0.0273	2.0688	0.5533	0.0258	0.5791		3,560.4444	3,560.4444	0.1620		3,564.4950	

3.3 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	lb/day											lb/day					
Off-Road	1.4769	10.0578	10.9530	0.0179			0.4271	0.4271		0.4136	0.4136		1,570.2831	1,570.2831	0.3360		1,578.6826
Total	1.4769	10.0578	10.9530	0.0179			0.4271	0.4271		0.4136	0.4136		1,570.2831	1,570.2831	0.3360		1,578.6826

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	lb/day											lb/day					
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	0.2302	7.8009	1.7671	0.0205	0.5218	0.0151	0.5369	0.1502	0.0145	0.1647	2,166.0794	4	2,166.0794	0.1232	2,169.1596		
Worker	0.6059	0.4135	4.1453	0.0133	1.5197	9.5800e-003	1.5293	0.4031	8.8200e-003	0.4119	1,322.7519	9	1,322.7519	0.0296	1,323.4921		
Total	0.8361	8.2145	5.9124	0.0338	2.0415	0.0247	2.0662	0.5533	0.0233	0.5766	3,488.8313	3	3,488.8313	0.1528		3,492.6516	

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/day											lb/day					
Off-Road	1.4769	10.0578	10.9530	0.0179		0.4271	0.4271		0.4136	0.4136	0.0000	1,570.2831	1	1,570.2831	0.3360	1,578.6826	
Total	1.4769	10.0578	10.9530	0.0179		0.4271	0.4271		0.4136	0.4136	0.0000	1,570.2831	1	1,570.2831	0.3360	1,578.6826	

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/day											lb/day					
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	0.2302	7.8009	1.7671	0.0205	0.5218	0.0151	0.5369	0.1502	0.0145	0.1647	2,166.0794	4	2,166.0794	0.1232	2,169.1596		
Worker	0.6059	0.4135	4.1453	0.0133	1.5197	9.5800e-003	1.5293	0.4031	8.8200e-003	0.4119	1,322.7519	9	1,322.7519	0.0296	1,323.4921		
Total	0.8361	8.2145	5.9124	0.0338	2.0415	0.0247	2.0662	0.5533	0.0233	0.5766	3,488.8313	3	3,488.8313	0.1528		3,492.6516	

3.4 Paving - 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	lb/day											lb/day					
Off-Road	0.4846	4.8183	5.7799	8.7800e-003			0.2630	0.2630		0.2423	0.2423		845.0790	845.0790	0.2705		851.8426
Paving	0.0000						0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000
Total	0.4846	4.8183	5.7799	8.7800e-003			0.2630	0.2630		0.2423	0.2423		845.0790	845.0790	0.2705		851.8426

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	lb/day											lb/day					
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	
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	
Worker	0.0426	0.0291	0.2913	9.3000e-004	0.1068	6.7000e-004	0.1075	0.0283	6.2000e-004	0.0290		92.9501	92.9501	2.0800e-003		93.0021	
Total	0.0426	0.0291	0.2913	9.3000e-004	0.1068	6.7000e-004	0.1075	0.0283	6.2000e-004	0.0290		92.9501	92.9501	2.0800e-003		93.0021	

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/day											lb/day					
Off-Road	0.4846	4.8183	5.7799	8.7800e-003			0.2630	0.2630		0.2423	0.2423	0.0000	845.0790	845.0790	0.2705		851.8426
Paving	0.0000						0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000
Total	0.4846	4.8183	5.7799	8.7800e-003			0.2630	0.2630		0.2423	0.2423	0.0000	845.0790	845.0790	0.2705		851.8426

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/day										lb/day						
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	0.0426	0.0291	0.2913	9.3000e-004	0.1068	6.7000e-004	0.1075	0.0283	6.2000e-004	0.0290	92.9501	92.9501	2.0800e-003	93.0021			
Total	0.0426	0.0291	0.2913	9.3000e-004	0.1068	6.7000e-004	0.1075	0.0283	6.2000e-004	0.0290	92.9501	92.9501	2.0800e-003	93.0021			

3.5 Architectural Coating - 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	lb/day										lb/day						
Archit. Coating	14.9664						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.4478	4.9919	3.0162	7.3700e-003		0.2139	0.2139		0.1968	0.1968		714.1557	714.1557	0.2310		719.9300	
Total	15.4142	4.9919	3.0162	7.3700e-003		0.2139	0.2139		0.1968	0.1968		714.1557	714.1557	0.2310		719.9300	

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	lb/day										lb/day						
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	0.1212	0.0827	0.8291	2.6500e-003	0.3040	1.9200e-003	0.3059	0.0806	1.7600e-003	0.0824	264.5504	264.5504	5.9200e-003	264.6984			
Total	0.1212	0.0827	0.8291	2.6500e-003	0.3040	1.9200e-003	0.3059	0.0806	1.7600e-003	0.0824	264.5504	264.5504	5.9200e-003	264.6984			

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/day										lb/day						
Archit. Coating	14.9664						0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Off-Road	0.4478	4.9919	3.0162	7.3700e-003			0.2139	0.2139		0.1968	0.1968	0.0000	714.1557	714.1557	0.2310		719.9300
Total	15.4142	4.9919	3.0162	7.3700e-003			0.2139	0.2139		0.1968	0.1968	0.0000	714.1557	714.1557	0.2310		719.9300

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/day										lb/day						
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	0.1212	0.0827	0.8291	2.6500e-003	0.3040	1.9200e-003	0.3059	0.0806	1.7600e-003	0.0824		264.5504	264.5504	5.9200e-003		264.6984	
Total	0.1212	0.0827	0.8291	2.6500e-003	0.3040	1.9200e-003	0.3059	0.0806	1.7600e-003	0.0824		264.5504	264.5504	5.9200e-003		264.6984	

10x Genomics Redevelopment Project - Phase 3 Construction - Alameda County, Annual

10x Genomics Redevelopment Project - Phase 3 Construction
Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	63.83	1000sqft	0.37	63,834.00	0
Research & Development	52.23	1000sqft	0.30	52,228.00	0
Parking Lot	90.00	Space	0.83	36,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 7

Consumer Products - CalEEMod Note 7

Area Coating - CalEEMod Note 7

Energy Use - CalEEMod Note 7

Water And Wastewater - CalEEMod Note 7

Solid Waste - CalEEMod Note 7

Construction Off-road Equipment Mitigation - CalEEMod Note 8

Off-road Equipment - CalEEMod Note 4

Off-road Equipment - CalEEMod Note 4

Off-road Equipment - CalEEMod Note 4

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	29.00
tblConstructionPhase	NumDays	200.00	36.00
tblConstructionPhase	NumDays	10.00	11.00
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	NT24E	7.84	0.00
tblEnergyUse	NT24E	3.70	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	NT24NG	6.67	0.00
tblEnergyUse	T24E	6.11	0.00
tblEnergyUse	T24E	1.48	0.00
tblEnergyUse	T24NG	16.31	0.00
tblEnergyUse	T24NG	19.71	0.00
tblLandUse	LandUseSquareFeet	63,830.00	63,834.00
tblLandUse	LandUseSquareFeet	52,230.00	52,228.00
tblLandUse	LotAcreage	1.47	0.37
tblLandUse	LotAcreage	1.20	0.30
tblLandUse	LotAcreage	0.81	0.83
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	UsageHours	6.00	2.00

tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblSolidWaste	SolidWasteGenerationRate	59.36	0.00
tblSolidWaste	SolidWasteGenerationRate	3.97	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblWater	IndoorWaterUseRate	11,344,745.13	0.00
tblWater	IndoorWaterUseRate	25,681,174.86	0.00
tblWater	OutdoorWaterUseRate	6,953,230.89	0.00

2.0 Emissions Summary

2.1 Overall Construction

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	tons/yr										MT/yr					
2022	0.6542	0.3280	0.3070	6.8000e-004	0.0119	0.0124	0.0243	3.2400e-003	0.0118	0.0150	0.0000	58.3523	58.3523	0.0107	0.0000	58.6188
Maximum	0.6542	0.3280	0.3070	6.8000e-004	0.0119	0.0124	0.0243	3.2400e-003	0.0118	0.0150	0.0000	58.3523	58.3523	0.0107	0.0000	58.6188

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	tons/yr										MT/yr					
2022	0.6542	0.3280	0.3070	6.8000e-004	0.0119	0.0124	0.0243	3.2400e-003	0.0118	0.0150	0.0000	58.3523	58.3523	0.0107	0.0000	58.6187
Maximum	0.6542	0.3280	0.3070	6.8000e-004	0.0119	0.0124	0.0243	3.2400e-003	0.0118	0.0150	0.0000	58.3523	58.3523	0.0107	0.0000	58.6187

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Quarter	Start Date		End Date		Maximum Unmitigated ROG + NOX (tons/quarter)						Maximum Mitigated ROG + NOX (tons/quarter)					
3	5-9-2022		8-8-2022		0.9856						0.9856					
			Highest		0.9856						0.9856					

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	5/16/2022	7/4/2022	5	36	
2	Paving	Paving	5/25/2022	6/8/2022	5	11	
3	Architectural Coating	Architectural Coating	5/25/2022	7/4/2022	5	29	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.83

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 174,093; Non-Residential Outdoor: 58,031; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cement and Mortar Mixers	1	2.00	9	0.56
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Sweepers/Scrubbers	1	4.00	64	0.46
Building Construction	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	2.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Sweepers/Scrubbers	1	4.00	64	0.46
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Architectural Coating	Aerial Lifts	2	2.00	63	0.31
Architectural Coating	Air Compressors	0	6.00	78	0.48
Architectural Coating	Cranes	1	8.00	231	0.29
Architectural Coating	Forklifts	1	4.00	89	0.20

Trips and VMT

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
Building Construction	9	52.00	25.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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	0.0266	0.1810	0.1972	3.2000e-004		7.6900e-003	7.6900e-003		7.4500e-003	7.4500e-003	0.0000	25.6417	25.6417	5.4900e-003	0.0000	25.7788
Total	0.0266	0.1810	0.1972	3.2000e-004		7.6900e-003	7.6900e-003		7.4500e-003	7.4500e-003	0.0000	25.6417	25.6417	5.4900e-003	0.0000	25.7788

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	1.3000e-003	0.0457	9.5500e-003	1.2000e-004	2.9600e-003	9.0000e-005	3.0400e-003	8.5000e-004	8.0000e-005	9.4000e-004	0.0000	11.6734	11.6734	6.2000e-004	0.0000	11.6889	
Worker	2.7800e-003	1.9100e-003	0.0204	7.0000e-005	7.4000e-003	5.0000e-005	7.4500e-003	1.9700e-003	4.0000e-005	2.0100e-003	0.0000	6.1191	6.1191	1.4000e-004	0.0000	6.1225	
Total	4.0800e-003	0.0476	0.0300	1.9000e-004	0.0104	1.4000e-004	0.0105	2.8200e-003	1.2000e-004	2.9500e-003	0.0000	17.7925	17.7925	7.6000e-004	0.0000	17.8113	

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	0.0266	0.1810	0.1972	3.2000e-004		7.6900e-003	7.6900e-003	7.4500e-003	7.4500e-003	0.0000	25.6416	25.6416	5.4900e-003	0.0000	25.7788		
Total	0.0266	0.1810	0.1972	3.2000e-004		7.6900e-003	7.6900e-003	7.4500e-003	7.4500e-003	0.0000	25.6416	25.6416	5.4900e-003	0.0000	25.7788		

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	1.3000e-003	0.0457	9.5500e-003	1.2000e-004	2.9600e-003	9.0000e-005	3.0400e-003	8.5000e-004	8.0000e-005	9.4000e-004	0.0000	11.6734	11.6734	6.2000e-004	0.0000	11.6889	
Worker	2.7800e-003	1.9100e-003	0.0204	7.0000e-005	7.4000e-003	5.0000e-005	7.4500e-003	1.9700e-003	4.0000e-005	2.0100e-003	0.0000	6.1191	6.1191	1.4000e-004	0.0000	6.1225	
Total	4.0800e-003	0.0476	0.0300	1.9000e-004	0.0104	1.4000e-004	0.0105	2.8200e-003	1.2000e-004	2.9500e-003	0.0000	17.7925	17.7925	7.6000e-004	0.0000	17.8113	

3.3 Paving - 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	2.6700e-003	0.0265	0.0318	5.0000e-005		1.4500e-003	1.4500e-003		1.3300e-003	1.3300e-003	0.0000	4.2165	4.2165	1.3500e-003	0.0000	4.2503	
Paving	1.0900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	3.7600e-003	0.0265	0.0318	5.0000e-005		1.4500e-003	1.4500e-003		1.3300e-003	1.3300e-003	0.0000	4.2165	4.2165	1.3500e-003	0.0000	4.2503	

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	1.6000e-004	1.1000e-004	1.2000e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3596	0.3596	1.0000e-005	0.0000	0.3598	
Total	1.6000e-004	1.1000e-004	1.2000e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3596	0.3596	1.0000e-005	0.0000	0.3598	

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	2.6700e-003	0.0265	0.0318	5.0000e-005		1.4500e-003	1.4500e-003		1.3300e-003	1.3300e-003	0.0000	4.2165	4.2165	1.3500e-003	0.0000	4.2503	
Paving	1.0900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	3.7600e-003	0.0265	0.0318	5.0000e-005		1.4500e-003	1.4500e-003		1.3300e-003	1.3300e-003	0.0000	4.2165	4.2165	1.3500e-003	0.0000	4.2503	

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	1.6000e-004	1.1000e-004	1.2000e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3596	0.3596	1.0000e-005	0.0000	0.3598	
Total	1.6000e-004	1.1000e-004	1.2000e-003	0.0000	4.3000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3596	0.3596	1.0000e-005	0.0000	0.3598	

3.4 Architectural Coating - 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					
Archit. Coating	0.6127						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	6.4900e-003	0.0724	0.0437	1.1000e-004		3.1000e-003	3.1000e-003	2.8500e-003	2.8500e-003	0.0000	9.3941	9.3941	3.0400e-003	0.0000	9.4701		
Total	0.6192	0.0724	0.0437	1.1000e-004		3.1000e-003	3.1000e-003	2.8500e-003	2.8500e-003	0.0000	9.3941	9.3941	3.0400e-003	0.0000	9.4701		

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	4.3000e-004	3.0000e-004	3.1600e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1500e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.9479	0.9479	2.0000e-005	0.0000	0.9485	
Total	4.3000e-004	3.0000e-004	3.1600e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1500e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.9479	0.9479	2.0000e-005	0.0000	0.9485	

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	0.6127						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.4900e-003	0.0724	0.0437	1.1000e-004			3.1000e-003	3.1000e-003		2.8500e-003	2.8500e-003	0.0000	9.3941	9.3941	3.0400e-003	0.0000	9.4701
Total	0.6192	0.0724	0.0437	1.1000e-004			3.1000e-003	3.1000e-003		2.8500e-003	2.8500e-003	0.0000	9.3941	9.3941	3.0400e-003	0.0000	9.4701

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	4.3000e-004	3.0000e-004	3.1600e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1500e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.9479	0.9479	2.0000e-005	0.0000	0.9485	
Total	4.3000e-004	3.0000e-004	3.1600e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1500e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.9479	0.9479	2.0000e-005	0.0000	0.9485	

10x Genomics Redevelopment Project - Phase 3 Construction - Alameda County, Summer

10x Genomics Redevelopment Project - Phase 3 Construction

Alameda County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	63.83	1000sqft	0.37	63,834.00	0
Research & Development	52.23	1000sqft	0.30	52,228.00	0
Parking Lot	90.00	Space	0.83	36,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 7

Consumer Products - CalEEMod Note 7

Area Coating - CalEEMod Note 7

Energy Use - CalEEMod Note 7

Water And Wastewater - CalEEMod Note 7

Solid Waste - CalEEMod Note 7

Construction Off-road Equipment Mitigation - CalEEMod Note 8

Off-road Equipment - CalEEMod Note 4

Off-road Equipment - CalEEMod Note 4

Off-road Equipment - CalEEMod Note 4

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	29.00
tblConstructionPhase	NumDays	200.00	36.00
tblConstructionPhase	NumDays	10.00	11.00
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	NT24E	7.84	0.00
tblEnergyUse	NT24E	3.70	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	NT24NG	6.67	0.00
tblEnergyUse	T24E	6.11	0.00
tblEnergyUse	T24E	1.48	0.00
tblEnergyUse	T24NG	16.31	0.00
tblEnergyUse	T24NG	19.71	0.00
tblLandUse	LandUseSquareFeet	63,830.00	63,834.00
tblLandUse	LandUseSquareFeet	52,230.00	52,228.00
tblLandUse	LotAcreage	1.47	0.37
tblLandUse	LotAcreage	1.20	0.30
tblLandUse	LotAcreage	0.81	0.83
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	UsageHours	6.00	2.00

tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblSolidWaste	SolidWasteGenerationRate	59.36	0.00
tblSolidWaste	SolidWasteGenerationRate	3.97	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblWater	IndoorWaterUseRate	11,344,745.13	0.00
tblWater	IndoorWaterUseRate	25,681,174.86	0.00
tblWater	OutdoorWaterUseRate	6,953,230.89	0.00

2.0 Emissions Summary

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/day										lb/day					
2022	45.1585	22.5142	21.9638	0.0465	0.7609	0.9124	1.6733	0.2057	0.8606	1.0663	0.0000	4,412.2168	4,412.2168	0.8861	0.0000	4,434.3697
Maximum	45.1585	22.5142	21.9638	0.0465	0.7609	0.9124	1.6733	0.2057	0.8606	1.0663	0.0000	4,412.2168	4,412.2168	0.8861	0.0000	4,434.3697

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					
2022	45.1585	22.5142	21.9638	0.0465	0.7609	0.9124	1.6733	0.2057	0.8606	1.0663	0.0000	4,412.2168	4,412.2168	0.8861	0.0000	4,434.3697
Maximum	45.1585	22.5142	21.9638	0.0465	0.7609	0.9124	1.6733	0.2057	0.8606	1.0663	0.0000	4,412.2168	4,412.2168	0.8861	0.0000	4,434.3697

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	5/16/2022	7/4/2022	5	36	
2	Paving	Paving	5/25/2022	6/8/2022	5	11	
3	Architectural Coating	Architectural Coating	5/25/2022	7/4/2022	5	29	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.83

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 174,093; Non-Residential Outdoor: 58,031; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cement and Mortar Mixers	1	2.00	9	0.56
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Sweepers/Scrubbers	1	4.00	64	0.46
Building Construction	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	2.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Sweepers/Scrubbers	1	4.00	64	0.46
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Architectural Coating	Aerial Lifts	2	2.00	63	0.31
Architectural Coating	Air Compressors	0	6.00	78	0.48
Architectural Coating	Cranes	1	8.00	231	0.29
Architectural Coating	Forklifts	1	4.00	89	0.20

Trips and VMT

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
Building Construction	9	52.00	25.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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	lb/day										lb/day					
Off-Road	1.4769	10.0578	10.9530	0.0179		0.4271	0.4271		0.4136	0.4136		1,570.2831	1,570.2831	0.3360		1,578.6826
Total	1.4769	10.0578	10.9530	0.0179		0.4271	0.4271		0.4136	0.4136		1,570.2831	1,570.2831	0.3360		1,578.6826

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	lb/day											lb/day					
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	0.0707	2.5168	0.4930	6.8500e-003	0.1694	4.7600e-003	0.1742	0.0488	4.5500e-003	0.0533	723.2801	723.2801	0.0363	724.1865			
Worker	0.1630	0.0935	1.2435	4.0500e-003	0.4272	2.6900e-003	0.4299	0.1133	2.4800e-003	0.1158	404.0248	404.0248	8.9300e-003	404.2480			
Total	0.2337	2.6103	1.7365	0.0109	0.5966	7.4500e-003	0.6040	0.1621	7.0300e-003	0.1691	1,127.3049	1,127.3049	0.0452		1,128.4345		

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/day											lb/day					
Off-Road	1.4769	10.0578	10.9530	0.0179		0.4271	0.4271		0.4136	0.4136	0.0000	1,570.2831	1,570.2831	0.3360		1,578.6826	
Total	1.4769	10.0578	10.9530	0.0179		0.4271	0.4271		0.4136	0.4136	0.0000	1,570.2831	1,570.2831	0.3360		1,578.6826	

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/day											lb/day					
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	0.0707	2.5168	0.4930	6.8500e-003	0.1694	4.7600e-003	0.1742	0.0488	4.5500e-003	0.0533	723.2801	723.2801	0.0363	724.1865			
Worker	0.1630	0.0935	1.2435	4.0500e-003	0.4272	2.6900e-003	0.4299	0.1133	2.4800e-003	0.1158	404.0248	404.0248	8.9300e-003	404.2480			
Total	0.2337	2.6103	1.7365	0.0109	0.5966	7.4500e-003	0.6040	0.1621	7.0300e-003	0.1691	1,127.3049	1,127.3049	0.0452		1,128.4345		

3.3 Paving - 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	lb/day										lb/day					
Off-Road	0.4846	4.8183	5.7799	8.7800e-003		0.2630	0.2630		0.2423	0.2423	0.0000	845.0790	845.0790	0.2705		851.8426
Paving	0.1977					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000
Total	0.6823	4.8183	5.7799	8.7800e-003		0.2630	0.2630		0.2423	0.2423		845.0790	845.0790	0.2705		851.8426

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	lb/day										lb/day					
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	0.0314	0.0180	0.2391	7.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223	0.0000	77.6971	77.6971	1.7200e-003	0.0000	77.7400
Total	0.0314	0.0180	0.2391	7.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		77.6971	77.6971	1.7200e-003		77.7400

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/day										lb/day					
Off-Road	0.4846	4.8183	5.7799	8.7800e-003		0.2630	0.2630		0.2423	0.2423	0.0000	845.0790	845.0790	0.2705		851.8426
Paving	0.1977					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000
Total	0.6823	4.8183	5.7799	8.7800e-003		0.2630	0.2630		0.2423	0.2423	0.0000	845.0790	845.0790	0.2705		851.8426

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/day											lb/day					
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	0.0314	0.0180	0.2391	7.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223	77.6971	77.6971	1.7200e-003	77.7400			
Total	0.0314	0.0180	0.2391	7.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223	77.6971	77.6971	1.7200e-003		77.7400		

3.4 Architectural Coating - 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	lb/day											lb/day					
Archit. Coating	42.2551						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.4478	4.9919	3.0162	7.3700e-003		0.2139	0.2139		0.1968	0.1968		714.1557	714.1557	0.2310		719.9300	
Total	42.7030	4.9919	3.0162	7.3700e-003		0.2139	0.2139		0.1968	0.1968		714.1557	714.1557	0.2310		719.9300	

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	lb/day											lb/day					
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	0.0314	0.0180	0.2391	7.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223	77.6971	77.6971	1.7200e-003	77.7400			
Total	0.0314	0.0180	0.2391	7.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223	77.6971	77.6971	1.7200e-003		77.7400		

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/day										lb/day						
Archit. Coating	42.2551						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.4478	4.9919	3.0162	7.3700e-003		0.2139	0.2139		0.1968	0.1968	0.0000	714.1557	714.1557	0.2310		719.9300	
Total	42.7030	4.9919	3.0162	7.3700e-003		0.2139	0.2139		0.1968	0.1968	0.0000	714.1557	714.1557	0.2310		719.9300	

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/day										lb/day						
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	0.0314	0.0180	0.2391	7.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223	77.6971	77.6971	1.7200e-003			77.7400	
Total	0.0314	0.0180	0.2391	7.8000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223			77.6971	77.6971	1.7200e-003		77.7400

10x Genomics Redevelopment Project - Phase 3 Construction - Alameda County, Winter

10x Genomics Redevelopment Project - Phase 3 Construction

Alameda County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	63.83	1000sqft	0.37	63,834.00	0
Research & Development	52.23	1000sqft	0.30	52,228.00	0
Parking Lot	90.00	Space	0.83	36,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 3

Off-road Equipment - CalEEMod Note 4

Demolition -

Grading -

Vehicle Trips - CalEEMod Note 7

Road Dust -

Consumer Products - CalEEMod Note 7

Area Coating - CalEEMod Note 7

Landscape Equipment -

Energy Use - CalEEMod Note 7

Water And Wastewater - CalEEMod Note 7

Solid Waste - CalEEMod Note 7

Construction Off-road Equipment Mitigation - CalEEMod Note 8

Off-road Equipment - CalEEMod Note 4

Off-road Equipment - CalEEMod Note 4

Off-road Equipment - CalEEMod Note 4

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	29.00
tblConstructionPhase	NumDays	200.00	36.00
tblConstructionPhase	NumDays	10.00	11.00
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	NT24E	7.84	0.00
tblEnergyUse	NT24E	3.70	0.00
tblEnergyUse	NT24NG	0.06	0.00
tblEnergyUse	NT24NG	6.67	0.00
tblEnergyUse	T24E	6.11	0.00
tblEnergyUse	T24E	1.48	0.00
tblEnergyUse	T24NG	16.31	0.00
tblEnergyUse	T24NG	19.71	0.00
tblLandUse	LandUseSquareFeet	63,830.00	63,834.00
tblLandUse	LandUseSquareFeet	52,230.00	52,228.00
tblLandUse	LotAcreage	1.47	0.37
tblLandUse	LotAcreage	1.20	0.30
tblLandUse	LotAcreage	0.81	0.83
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	4.00
tblOffRoadEquipment	UsageHours	6.00	2.00

tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblSolidWaste	SolidWasteGenerationRate	59.36	0.00
tblSolidWaste	SolidWasteGenerationRate	3.97	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	8.11	0.00
tblWater	IndoorWaterUseRate	11,344,745.13	0.00
tblWater	IndoorWaterUseRate	25,681,174.86	0.00
tblWater	OutdoorWaterUseRate	6,953,230.89	0.00

2.0 Emissions Summary

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/day										lb/day					
2022	45.1727	22.5616	21.9361	0.0459	0.7609	0.9126	1.6734	0.2057	0.8608	1.0664	0.0000	4,347.591	4,347.5910	0.8890	0.0000	4,369.816
Maximum	45.1727	22.5616	21.9361	0.0459	0.7609	0.9126	1.6734	0.2057	0.8608	1.0664	0.0000	4,347.591	4,347.5910	0.8890	0.0000	4,369.816

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						
2022	45.1727	22.5616	21.9361	0.0459	0.7609	0.9126	1.6734	0.2057	0.8608	1.0664	0.0000	4,347.5910	4,347.5910	0.8890	0.0000	4,369.8166	
Maximum	45.1727	22.5616	21.9361	0.0459	0.7609	0.9126	1.6734	0.2057	0.8608	1.0664	0.0000	4,347.5910	4,347.5910	0.8890	0.0000	4,369.8166	

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	5/16/2022	7/4/2022	5	36	
2	Paving	Paving	5/25/2022	6/8/2022	5	11	
3	Architectural Coating	Architectural Coating	5/25/2022	7/4/2022	5	29	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.83

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 174,093; Non-Residential Outdoor: 58,031; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Aerial Lifts	2	8.00	63	0.31
Building Construction	Cement and Mortar Mixers	1	2.00	9	0.56
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Sweepers/Scrubbers	1	4.00	64	0.46
Building Construction	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Welders	4	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	2.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Sweepers/Scrubbers	1	4.00	64	0.46
Paving	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Architectural Coating	Aerial Lifts	2	2.00	63	0.31
Architectural Coating	Air Compressors	0	6.00	78	0.48
Architectural Coating	Cranes	1	8.00	231	0.29
Architectural Coating	Forklifts	1	4.00	89	0.20

Trips and VMT

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
Building Construction	9	52.00	25.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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	lb/day											lb/day					
Off-Road	1.4769	10.0578	10.9530	0.0179		0.4271	0.4271		0.4136	0.4136		1,570.2831	1,570.2831	0.3360		1,578.6826	
Total	1.4769	10.0578	10.9530	0.0179		0.4271	0.4271		0.4136	0.4136		1,570.2831	1,570.2831	0.3360		1,578.6826	

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	lb/day											lb/day					
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	
Vendor	0.0748	2.5328	0.5737	6.6600e-003	0.1694	4.9100e-003	0.1743	0.0488	4.7000e-003	0.0535		703.2725	703.2725	0.0400		704.2726	
Worker	0.1703	0.1162	1.1652	3.7300e-003	0.4272	2.6900e-003	0.4299	0.1133	2.4800e-003	0.1158		371.8005	371.8005	8.3200e-003		372.0086	
Total	0.2451	2.6490	1.7389	0.0104	0.5966	7.6000e-003	0.6042	0.1621	7.1800e-003	0.1693		1,075.0731	1,075.0731	0.0483		1,076.2812	

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/day										lb/day						
Off-Road	1.4769	10.0578	10.9530	0.0179		0.4271	0.4271		0.4136	0.4136	0.0000	1,570.283	1,570.2831	0.3360		1,578.6826	
Total	1.4769	10.0578	10.9530	0.0179		0.4271	0.4271		0.4136	0.4136	0.0000	1,570.283	1,570.2831	0.3360		1,578.6826	

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/day										lb/day						
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	0.0748	2.5328	0.5737	6.6600e-003	0.1694	4.9100e-003	0.1743	0.0488	4.7000e-003	0.0535	703.2725	703.2725	0.0400	704.2726			
Worker	0.1703	0.1162	1.1652	3.7300e-003	0.4272	2.6900e-003	0.4299	0.1133	2.4800e-003	0.1158	371.8005	371.8005	8.3200e-003	372.0086			
Total	0.2451	2.6490	1.7389	0.0104	0.5966	7.6000e-003	0.6042	0.1621	7.1800e-003	0.1693	1,075.073	1,075.0731	0.0483		1,076.2812		

3.3 Paving - 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	lb/day										lb/day						
Off-Road	0.4846	4.8183	5.7799	8.7800e-003		0.2630	0.2630		0.2423	0.2423	845.0790	845.0790	0.2705		851.8426		
Paving	0.1977					0.0000	0.0000		0.0000	0.0000		0.0000			0.0000		
Total	0.6823	4.8183	5.7799	8.7800e-003		0.2630	0.2630		0.2423	0.2423		845.0790	845.0790	0.2705		851.8426	

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	lb/day											lb/day					
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	0.0328	0.0224	0.2241	7.2000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223	71.5001	71.5001	1.6000e-003	71.5401			
Total	0.0328	0.0224	0.2241	7.2000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		71.5001	71.5001	1.6000e-003		71.5401	

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/day											lb/day					
Off-Road	0.4846	4.8183	5.7799	8.7800e-003		0.2630	0.2630		0.2423	0.2423	0.0000	845.0790	845.0790	0.2705		851.8426	
Paving	0.1977					0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	
Total	0.6823	4.8183	5.7799	8.7800e-003		0.2630	0.2630		0.2423	0.2423	0.0000	845.0790	845.0790	0.2705		851.8426	

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/day											lb/day					
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	0.0328	0.0224	0.2241	7.2000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223	71.5001	71.5001	1.6000e-003	71.5401			
Total	0.0328	0.0224	0.2241	7.2000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		71.5001	71.5001	1.6000e-003		71.5401	

3.4 Architectural Coating - 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	lb/day											lb/day					
Archit. Coating	42.2551						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.4478	4.9919	3.0162	7.3700e-003			0.2139	0.2139		0.1968	0.1968		714.1557	714.1557	0.2310		719.9300
Total	42.7030	4.9919	3.0162	7.3700e-003			0.2139	0.2139		0.1968	0.1968		714.1557	714.1557	0.2310		719.9300

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	lb/day											lb/day					
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	
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	
Worker	0.0328	0.0224	0.2241	7.2000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		71.5001	71.5001	1.6000e-003		71.5401	
Total	0.0328	0.0224	0.2241	7.2000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223		71.5001	71.5001	1.6000e-003		71.5401	

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/day											lb/day						
Archit. Coating	42.2551						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000		
Off-Road	0.4478	4.9919	3.0162	7.3700e-003			0.2139	0.2139		0.1968	0.1968		0.0000	714.1557	714.1557	0.2310		719.9300
Total	42.7030	4.9919	3.0162	7.3700e-003			0.2139	0.2139		0.1968	0.1968		0.0000	714.1557	714.1557	0.2310		719.9300

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/day										lb/day						
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	0.0328	0.0224	0.2241	7.2000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223	71.5001	71.5001	1.6000e-003	71.5401			
Total	0.0328	0.0224	0.2241	7.2000e-004	0.0822	5.2000e-004	0.0827	0.0218	4.8000e-004	0.0223	71.5001	71.5001	1.6000e-003			71.5401	

10x Genomics Redevelopment Project - Existing Operations Year 2022 - Alameda County, Annual

10x Genomics Redevelopment Project - Existing Operations Year 2022
Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	340.00	1000sqft	7.81	340,000.00	0
Regional Shopping Center	163.50	1000sqft	3.02	163,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 9

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	0.00
tblLandUse	LotAcreage	3.75	3.02
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblVehicleTrips	ST_TR	49.97	5.14
tblVehicleTrips	SU_TR	25.24	5.14
tblVehicleTrips	WD_TR	42.70	5.14

2.0 Emissions Summary

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	0.7533	4.0000e-005	4.6300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5900e-003
Energy	2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	198.5006	198.5006	0.0250	5.4600e-003	200.7514
Mobile	0.2064	1.3526	2.0305	7.3600e-003	0.5511	7.0100e-003	0.5581	0.1481	6.5900e-003	0.1547	0.0000	679.7099	679.7099	0.0324	0.0000	680.5190
Waste						0.0000	0.0000		0.0000	0.0000	34.8495	0.0000	34.8495	2.0596	0.0000	86.3381
Water						0.0000	0.0000		0.0000	0.0000	3.8422	8.7169	12.5591	0.3958	9.5700e-003	25.3060
Total	0.9618	1.3716	2.0511	7.4700e-003	0.5511	8.4700e-003	0.5596	0.1481	8.0500e-003	0.1562	38.6917	886.9364	925.6281	2.5127	0.0150	992.9241

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	0.7533	4.0000e-005	4.6300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5900e-003
Energy	2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	198.5006	198.5006	0.0250	5.4600e-003	200.7514
Mobile	0.2064	1.3526	2.0305	7.3600e-003	0.5511	7.0100e-003	0.5581	0.1481	6.5900e-003	0.1547	0.0000	679.7099	679.7099	0.0324	0.0000	680.5190
Waste						0.0000	0.0000		0.0000	0.0000	34.8495	0.0000	34.8495	2.0596	0.0000	86.3381
Water						0.0000	0.0000		0.0000	0.0000	3.8422	8.7169	12.5591	0.3958	9.5700e-003	25.3060
Total	0.9618	1.3716	2.0511	7.4700e-003	0.5511	8.4700e-003	0.5596	0.1481	8.0500e-003	0.1562	38.6917	886.9364	925.6281	2.5127	0.0150	992.9241

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.2064	1.3526	2.0305	7.3600e-003	0.5511	7.0100e-003	0.5581	0.1481	6.5900e-003	0.1547	0.0000	679.7099	679.7099	0.0324	0.0000	680.5190	
Unmitigated	0.2064	1.3526	2.0305	7.3600e-003	0.5511	7.0100e-003	0.5581	0.1481	6.5900e-003	0.1547	0.0000	679.7099	679.7099	0.0324	0.0000	680.5190	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
Parking Lot	0.00	0.00	0.00				
Regional Shopping Center	840.39	840.39	840.39	1,473,460		1,473,460	
Total	840.39	840.39	840.39	1,473,460		1,473,460	

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721
Regional Shopping Center	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	tons/yr										MT/yr						
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	177.8223	177.8223	0.0246	5.0800e-003	179.9503	
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	177.8223	177.8223	0.0246	5.0800e-003	179.9503	
NaturalGas Mitigated	2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.6782	20.6782	4.0000e-004	3.8000e-004	20.8011	
NaturalGas Unmitigated	2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.6782	20.6782	4.0000e-004	3.8000e-004	20.8011	

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						
Parking Lot	0	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	
Regional Shopping Center	387495	2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.6782	20.6782	4.0000e-004	3.8000e-004	20.8011	
Total		2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.6782	20.6782	4.0000e-004	3.8000e-004	20.8011	

Mitigated

	Natural Gas 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					
Parking Lot	0	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
Regional Shopping Center	387495	2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.6782	20.6782	4.0000e-004	3.8000e-004	20.8011
Total		2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.6782	20.6782	4.0000e-004	3.8000e-004	20.8011

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	119000	11.3353	1.5700e-003	3.2000e-004	11.4709
Regional Shopping Center	1.74782e+006	166.4871	0.0230	4.7600e-003	168.4794
Total		177.8223	0.0246	5.0800e-003	179.9503

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	119000	11.3353	1.5700e-003	3.2000e-004	11.4709
Regional Shopping Center	1.74782e+006	166.4871	0.0230	4.7600e-003	168.4794
Total		177.8223	0.0246	5.0800e-003	179.9503

6.0 Area Detail

6.1 Mitigation Measures Area

	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	0.7533	4.0000e-005	4.6300e-003	0.0000		2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5900e-003		
Unmitigated	0.7533	4.0000e-005	4.6300e-003	0.0000		2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5900e-003		

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	0.0924						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	0.6605						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	4.3000e-004	4.0000e-005	4.6300e-003	0.0000		2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5900e-003		
Total	0.7533	4.0000e-005	4.6300e-003	0.0000		2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5900e-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	0.0924						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	0.6605						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	4.3000e-004	4.0000e-005	4.6300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5900e-003	
Total	0.7533	4.0000e-005	4.6300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5900e-003	

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	12.5591	0.3958	9.5700e-003	25.3060
Unmitigated	12.5591	0.3958	9.5700e-003	25.3060

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	12.1109 / 7.42278	12.5591	0.3958	9.5700e-003	25.3060
Total		12.5591	0.3958	9.5700e-003	25.3060

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	12.1109 / 7.42278	12.5591	0.3958	9.5700e-003	25.3060
Total		12.5591	0.3958	9.5700e-003	25.3060

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	34.8495	2.0596	0.0000	86.3381
Unmitigated	34.8495	2.0596	0.0000	86.3381

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	171.68	34.8495	2.0596	0.0000	86.3381
Total		34.8495	2.0596	0.0000	86.3381

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	171.68	34.8495	2.0596	0.0000	86.3381
Total		34.8495	2.0596	0.0000	86.3381

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

10x Genomics Redevelopment Project - Existing Operations Year 2022 - Alameda County, Summer

10x Genomics Redevelopment Project - Existing Operations Year 2022

Alameda County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	340.00	1000sqft	7.81	340,000.00	0
Regional Shopping Center	163.50	1000sqft	3.02	163,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 9

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	0.00
tblLandUse	LotAcreage	3.75	3.02
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblVehicleTrips	ST_TR	49.97	5.14
tblVehicleTrips	SU_TR	25.24	5.14
tblVehicleTrips	WD_TR	42.70	5.14

2.0 Emissions Summary

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/day										lb/day					
Area	4.1301	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		0.1102	0.1102	2.9000e-004		0.1175
Energy	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399
Mobile	1.3140	7.2952	11.3034	0.0427	3.1435	0.0384	3.1819	0.8423	0.0361	0.8783		4,341.883	4,341.8831	0.1928		4,346.7019
Total	5.4556	7.3998	11.4423	0.0433	3.1435	0.0465	3.1900	0.8423	0.0442	0.8864		4,466.8909	4,466.8909	0.1954	2.2900e-003	4,472.4593

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/day										lb/day					
Area	4.1301	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		0.1102	0.1102	2.9000e-004		0.1175
Energy	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399
Mobile	1.3140	7.2952	11.3034	0.0427	3.1435	0.0384	3.1819	0.8423	0.0361	0.8783		4,341.883	4,341.8831	0.1928		4,346.7019
Total	5.4556	7.3998	11.4423	0.0433	3.1435	0.0465	3.1900	0.8423	0.0442	0.8864		4,466.8909	4,466.8909	0.1954	2.2900e-003	4,472.4593
	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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/day						
Mitigated	1.3140	7.2952	11.3034	0.0427	3.1435	0.0384	3.1819	0.8423	0.0361	0.8783	4,341.883	4,341.8831	0.1928			4,346.7019	
Unmitigated	1.3140	7.2952	11.3034	0.0427	3.1435	0.0384	3.1819	0.8423	0.0361	0.8783	4,341.883	4,341.8831	0.1928			4,346.7019	

4.2 Trip Summary Information

		Average Daily Trip Rate			Unmitigated		Mitigated	
Land Use		Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
Parking Lot		0.00	0.00	0.00				
Regional Shopping Center		840.39	840.39	840.39	1,473,460		1,473,460	
Total		840.39	840.39	840.39	1,473,460		1,473,460	

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721
Regional Shopping Center	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	lb/day										lb/day						
NaturalGas Mitigated	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	
NaturalGas Unmitigated	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	

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	lb/day										lb/day						
Parking Lot	0	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	
Regional Shopping Center	1061.63	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	
Total		0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	

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	lb/day										lb/day						
Parking Lot	0	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	
Regional Shopping Center	1.06163	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	
Total		0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	

6.0 Area Detail

6.1 Mitigation Measures Area

	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/day					
Mitigated	4.1301	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.9000e-004			0.1175
Unmitigated	4.1301	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.9000e-004			0.1175

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	lb/day										lb/day					
Architectural Coating	0.5060						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	3.6193						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	4.7900e-003	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.9000e-004			0.1175
Total	4.1301	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.9000e-004			0.1175

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					
Architectural Coating	0.5060						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	3.6193						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	4.7900e-003	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.9000e-004			0.1175
Total	4.1301	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.9000e-004			0.1175

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

10x Genomics Redevelopment Project - Existing Operations Year 2022 - Alameda County, Winter

10x Genomics Redevelopment Project - Existing Operations Year 2022

Alameda County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	340.00	1000sqft	7.81	340,000.00	0
Regional Shopping Center	163.50	1000sqft	3.02	163,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 9

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	0.00
tblLandUse	LotAcreage	3.75	3.02
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblVehicleTrips	ST_TR	49.97	5.14
tblVehicleTrips	SU_TR	25.24	5.14
tblVehicleTrips	WD_TR	42.70	5.14

2.0 Emissions Summary

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/day										lb/day					
Area	4.1301	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		0.1102	0.1102	2.9000e-004		0.1175
Energy	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399
Mobile	1.1215	7.4884	11.8463	0.0400	3.1435	0.0389	3.1824	0.8423	0.0365	0.8788		4,067.399	4,067.3995	0.2046		4,072.514
Total	5.2631	7.5930	11.9852	0.0406	3.1435	0.0469	3.1905	0.8423	0.0446	0.8869		4,192.407	4,192.4073	0.2073	2.2900e-003	4,198.271
											3					7

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/day										lb/day					
Area	4.1301	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		0.1102	0.1102	2.9000e-004		0.1175
Energy	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399
Mobile	1.1215	7.4884	11.8463	0.0400	3.1435	0.0389	3.1824	0.8423	0.0365	0.8788		4,067.399	4,067.3995	0.2046		4,072.514
Total	5.2631	7.5930	11.9852	0.0406	3.1435	0.0469	3.1905	0.8423	0.0446	0.8869		4,192.407	4,192.4073	0.2073	2.2900e-003	4,198.271
											3					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	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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/day						
Mitigated	1.1215	7.4884	11.8463	0.0400	3.1435	0.0389	3.1824	0.8423	0.0365	0.8788	4,067.3995	4,067.3995	0.2046			4,072.5143	
Unmitigated	1.1215	7.4884	11.8463	0.0400	3.1435	0.0389	3.1824	0.8423	0.0365	0.8788	4,067.3995	4,067.3995	0.2046			4,072.5143	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
Parking Lot	0.00	0.00	0.00				
Regional Shopping Center	840.39	840.39	840.39	1,473,460		1,473,460	
Total	840.39	840.39	840.39	1,473,460		1,473,460	

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721
Regional Shopping Center	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	lb/day										lb/day						
NaturalGas Mitigated	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	
NaturalGas Unmitigated	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	

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	lb/day										lb/day						
Parking Lot	0	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	
Regional Shopping Center	1061.63	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	
Total		0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	

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	lb/day										lb/day						
Parking Lot	0	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	
Regional Shopping Center	1.06163	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	
Total		0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	

6.0 Area Detail

6.1 Mitigation Measures Area

	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/day					
Mitigated	4.1301	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.9000e-004			0.1175
Unmitigated	4.1301	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.9000e-004			0.1175

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	lb/day										lb/day					
Architectural Coating	0.5060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.7900e-003	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.9000e-004			0.1175
Total	4.1301	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.9000e-004			0.1175

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					
Architectural Coating	0.5060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.7900e-003	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.9000e-004			0.1175
Total	4.1301	4.7000e-004	0.0515	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.9000e-004			0.1175

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

10x Genomics Redevelopment Project - Existing Operations Year 2030 - Alameda County, Annual

10x Genomics Redevelopment Project - Existing Operations Year 2030
Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	340.00	1000sqft	7.81	340,000.00	0
Regional Shopping Center	163.50	1000sqft	3.02	163,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	184	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 12

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 9

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	0.00
tblLandUse	LotAcreage	3.75	3.02
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	184
tblVehicleTrips	ST_TR	49.97	5.14
tblVehicleTrips	SU_TR	25.24	5.14
tblVehicleTrips	WD_TR	42.70	5.14

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	0.7533	4.0000e-005	4.6000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5800e-003	
Energy	2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	176.4845	176.4845	0.0250	5.4600e-003	178.7353	
Mobile	0.1292	1.0057	1.2572	6.1500e-003	0.5507	3.8600e-003	0.5545	0.1479	3.6000e-003	0.1515	0.0000	571.3960	571.3960	0.0231	0.0000	571.9734	
Waste						0.0000	0.0000		0.0000	0.0000	34.8495	0.0000	34.8495	2.0596	0.0000	86.3381	
Water						0.0000	0.0000		0.0000	0.0000	3.8422	7.6377	11.4799	0.3958	9.5700e-003	24.2268	
Total	0.8846	1.0247	1.2777	6.2600e-003	0.5507	5.3200e-003	0.5560	0.1479	5.0600e-003	0.1530	38.6917	755.5271	794.2188	2.5035	0.0150	861.2832	

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	0.7533	4.0000e-005	4.6000e-003	0.0000		2.0000e-005	2.0000e-005	2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5800e-003		
Energy	2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003	1.4400e-003	1.4400e-003	0.0000	176.4845	176.4845	0.0250	5.4600e-003	178.7353		
Mobile	0.1292	1.0057	1.2572	6.1500e-003	0.5507	3.8600e-003	0.5545	0.1479	3.6000e-003	0.1515	0.0000	571.3960	571.3960	0.0231	0.0000	571.9734	
Waste						0.0000	0.0000		0.0000	0.0000	34.8495	0.0000	34.8495	2.0596	0.0000	86.3381	
Water						0.0000	0.0000		0.0000	0.0000	3.8422	7.6377	11.4799	0.3958	9.5700e-003	24.2268	
Total	0.8846	1.0247	1.2777	6.2600e-003	0.5507	5.3200e-003	0.5560	0.1479	5.0600e-003	0.1530	38.6917	755.5271	794.2188	2.5035	0.0150	861.2832	
	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.1292	1.0057	1.2572	6.1500e-003	0.5507	3.8600e-003	0.5545	0.1479	3.6000e-003	0.1515	0.0000	571.3960	571.3960	0.0231	0.0000	571.9734
Unmitigated	0.1292	1.0057	1.2572	6.1500e-003	0.5507	3.8600e-003	0.5545	0.1479	3.6000e-003	0.1515	0.0000	571.3960	571.3960	0.0231	0.0000	571.9734

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
Parking Lot	0.00	0.00	0.00				
Regional Shopping Center	840.39	840.39	840.39	1,473,460		1,473,460	
Total	840.39	840.39	840.39	1,473,460		1,473,460	

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644
Regional Shopping Center	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	tons/yr											MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	155.8062	155.8062	0.0246	5.0800e-003		157.9342	
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	155.8062	155.8062	0.0246	5.0800e-003		157.9342	
NaturalGas Mitigated	2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003	1.4400e-003	1.4400e-003	0.0000	20.6782	20.6782	4.0000e-004	3.8000e-004		20.8011	
NaturalGas Unmitigated	2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003	1.4400e-003	1.4400e-003	0.0000	20.6782	20.6782	4.0000e-004	3.8000e-004		20.8011	

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					
Parking Lot	0	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
Regional Shopping Center	387495	2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.6782	20.6782	4.0000e-004	3.8000e-004	20.8011
Total		2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.6782	20.6782	4.0000e-004	3.8000e-004	20.8011

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					
Parking Lot	0	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
Regional Shopping Center	387495	2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.6782	20.6782	4.0000e-004	3.8000e-004	20.8011
Total		2.0900e-003	0.0190	0.0160	1.1000e-004		1.4400e-003	1.4400e-003		1.4400e-003	1.4400e-003	0.0000	20.6782	20.6782	4.0000e-004	3.8000e-004	20.8011

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	119000	9.9319	1.5700e-003	3.2000e-004	10.0675
Regional Shopping Center	1.74782e+006	145.8744	0.0230	4.7600e-003	147.8667
Total		155.8062	0.0246	5.0800e-003	157.9342

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Parking Lot	119000	9.9319	1.5700e-003	3.2000e-004	10.0675
Regional Shopping Center	1.74782e+006	145.8744	0.0230	4.7600e-003	147.8667
Total		155.8062	0.0246	5.0800e-003	157.9342

6.0 Area Detail

6.1 Mitigation Measures Area

	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	0.7533	4.0000e-005	4.6000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5800e-003
Unmitigated	0.7533	4.0000e-005	4.6000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5800e-003

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	0.0924					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6605					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.2000e-004	4.0000e-005	4.6000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5800e-003
Total	0.7533	4.0000e-005	4.6000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5800e-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	0.0924						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	0.6605						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	4.2000e-004	4.0000e-005	4.6000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5800e-003	
Total	0.7533	4.0000e-005	4.6000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.0000e-003	9.0000e-003	2.0000e-005	0.0000	9.5800e-003	

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	11.4799	0.3958	9.5700e-003	24.2268
Unmitigated	11.4799	0.3958	9.5700e-003	24.2268

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	12.1109 / 7.42278	11.4799	0.3958	9.5700e-003	24.2268
Total		11.4799	0.3958	9.5700e-003	24.2268

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	12.1109 / 7.42278	11.4799	0.3958	9.5700e-003	24.2268
Total		11.4799	0.3958	9.5700e-003	24.2268

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	34.8495	2.0596	0.0000	86.3381
Unmitigated	34.8495	2.0596	0.0000	86.3381

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	171.68	34.8495	2.0596	0.0000	86.3381
Total		34.8495	2.0596	0.0000	86.3381

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Regional Shopping Center	171.68	34.8495	2.0596	0.0000	86.3381
Total		34.8495	2.0596	0.0000	86.3381

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

10x Genomics Redevelopment Project - Existing Operations Year 2030 - Alameda County, Summer

10x Genomics Redevelopment Project - Existing Operations Year 2030

Alameda County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	340.00	1000sqft	7.81	340,000.00	0
Regional Shopping Center	163.50	1000sqft	3.02	163,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	184	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 12

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 9

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	0.00
tblLandUse	LotAcreage	3.75	3.02
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	184
tblVehicleTrips	ST_TR	49.97	5.14
tblVehicleTrips	SU_TR	25.24	5.14
tblVehicleTrips	WD_TR	42.70	5.14

2.0 Emissions Summary

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/day											lb/day					
Area	4.1300	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		0.1102	0.1102	2.8000e-004		0.1173	
Energy	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	
Mobile	0.8334	5.4689	7.0548	0.0355	3.1412	0.0212	3.1624	0.8410	0.0198	0.8608		3,635.5196	3,635.5196	0.1370		3,638.9435	
Total	4.9748	5.5734	7.1934	0.0361	3.1412	0.0293	3.1705	0.8410	0.0279	0.8689		3,760.5274	3,760.5274	0.1396	2.2900e-003	3,764.7006	

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/day											lb/day					
Area	4.1300	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		0.1102	0.1102	2.8000e-004		0.1173	
Energy	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	
Mobile	0.8334	5.4689	7.0548	0.0355	3.1412	0.0212	3.1624	0.8410	0.0198	0.8608		3,635.5196	3,635.5196	0.1370		3,638.9435	
Total	4.9748	5.5734	7.1934	0.0361	3.1412	0.0293	3.1705	0.8410	0.0279	0.8689		3,760.5274	3,760.5274	0.1396	2.2900e-003	3,764.7006	

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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/day						
Mitigated	0.8334	5.4689	7.0548	0.0355	3.1412	0.0212	3.1624	0.8410	0.0198	0.8608	3,635.519	3,635.5196	0.1370			3,638.943	
Unmitigated	0.8334	5.4689	7.0548	0.0355	3.1412	0.0212	3.1624	0.8410	0.0198	0.8608	3,635.519	3,635.5196	0.1370			3,638.943	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00				
Regional Shopping Center	840.39	840.39	840.39	1,473,460		1,473,460	
Total	840.39	840.39	840.39	1,473,460		1,473,460	

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644
Regional Shopping Center	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	lb/day										lb/day						
NaturalGas Mitigated	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	
NaturalGas Unmitigated	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	

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	lb/day										lb/day						
Parking Lot	0	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	
Regional Shopping Center	1061.63	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	
Total		0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	

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	lb/day										lb/day						
Parking Lot	0	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	
Regional Shopping Center	1.06163	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	
Total		0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	

6.0 Area Detail

6.1 Mitigation Measures Area

	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/day				
Mitigated	4.1300	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.8000e-004			0.1173	
Unmitigated	4.1300	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.8000e-004			0.1173	

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	lb/day										lb/day					
Architectural Coating	0.5060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.6800e-003	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.8000e-004			0.1173
Total	4.1300	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.8000e-004			0.1173

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					
Architectural Coating	0.5060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.6193					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.6800e-003	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.8000e-004			0.1173
Total	4.1300	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.8000e-004			0.1173

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

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

11.0 Vegetation

10x Genomics Redevelopment Project - Existing Operations Year 2030 - Alameda County, Winter

10x Genomics Redevelopment Project - Existing Operations Year 2030

Alameda County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	340.00	1000sqft	7.81	340,000.00	0
Regional Shopping Center	163.50	1000sqft	3.02	163,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	184	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 12

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 9

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	0.00
tblLandUse	LotAcreage	3.75	3.02
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	184
tblVehicleTrips	ST_TR	49.97	5.14
tblVehicleTrips	SU_TR	25.24	5.14
tblVehicleTrips	WD_TR	42.70	5.14

2.0 Emissions Summary

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/day										lb/day					
Area	4.1300	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		0.1102	0.1102	2.8000e-004		0.1173
Energy	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399
Mobile	0.6967	5.5426	7.2950	0.0334	3.1412	0.0213	3.1625	0.8410	0.0199	0.8609		3,415.9051	3,415.9051	0.1459		3,419.5535
Total	4.8382	5.6471	7.4336	0.0340	3.1412	0.0294	3.1706	0.8410	0.0280	0.8690		3,540.9129	3,540.9129	0.1486	2.2900e-003	3,545.3107

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/day										lb/day					
Area	4.1300	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004		0.1102	0.1102	2.8000e-004		0.1173
Energy	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399
Mobile	0.6967	5.5426	7.2950	0.0334	3.1412	0.0213	3.1625	0.8410	0.0199	0.8609		3,415.9051	3,415.9051	0.1459		3,419.5535
Total	4.8382	5.6471	7.4336	0.0340	3.1412	0.0294	3.1706	0.8410	0.0280	0.8690		3,540.9129	3,540.9129	0.1486	2.2900e-003	3,545.3107

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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/day						
Mitigated	0.6967	5.5426	7.2950	0.0334	3.1412	0.0213	3.1625	0.8410	0.0199	0.8609	3,415.905	3,415.9051	0.1459			3,419.553	
Unmitigated	0.6967	5.5426	7.2950	0.0334	3.1412	0.0213	3.1625	0.8410	0.0199	0.8609	3,415.905	3,415.9051	0.1459			3,419.553	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00				
Regional Shopping Center	840.39	840.39	840.39	1,473,460		1,473,460	
Total	840.39	840.39	840.39	1,473,460		1,473,460	

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644
Regional Shopping Center	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	lb/day											lb/day					
NaturalGas Mitigated	0.0115	0.1041	0.0874	6.2000e-004			7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399
NaturalGas Unmitigated	0.0115	0.1041	0.0874	6.2000e-004			7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399

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	lb/day											lb/day					
Parking Lot	0	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	
Regional Shopping Center	1061.63	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	
Total		0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	

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	lb/day											lb/day					
Parking Lot	0	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	
Regional Shopping Center	1.06163	0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	
Total		0.0115	0.1041	0.0874	6.2000e-004		7.9100e-003	7.9100e-003		7.9100e-003	7.9100e-003		124.8977	124.8977	2.3900e-003	2.2900e-003	125.6399	

6.0 Area Detail

6.1 Mitigation Measures Area

	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/day					
Mitigated	4.1300	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.8000e-004			0.1173	
Unmitigated	4.1300	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.8000e-004			0.1173	

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	lb/day										lb/day					
Architectural Coating	0.5060						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	3.6193						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	4.6800e-003	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.8000e-004			0.1173
Total	4.1300	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.8000e-004			0.1173

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					
Architectural Coating	0.5060						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	3.6193						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	4.6800e-003	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.8000e-004			0.1173
Total	4.1300	4.6000e-004	0.0512	0.0000		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.1102	0.1102	2.8000e-004			0.1173

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

10x Genomics Redevelopment Project - Project Operations Year 2022 - Alameda County, Annual

10x Genomics Redevelopment Project - Project Operations Year 2022
Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	207.08	1000sqft	1.34	207,084.00	0
Research & Development	153.98	1000sqft	0.98	153,978.00	0
Unrefrigerated Warehouse-No Rail	20.00	1000sqft	0.15	20,000.00	0
Parking Lot	90.00	Space	0.83	36,000.00	0
Unenclosed Parking with Elevator	1,168.00	Space	1.35	354,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 9

Energy Use - CalEEMod Note 10

Water And Wastewater - CalEEMod Note 13

Fleet Mix - CalEEMod Note 9

Stationary Sources - Emergency Generators and Fire Pumps - CalEEMod Note 11

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	0.00
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	LightingElect	2.14	0.00
tblEnergyUse	NT24E	7.84	17.47
tblEnergyUse	NT24E	3.70	22.21
tblEnergyUse	NT24E	1.07	23.93
tblEnergyUse	NT24NG	0.06	0.01
tblEnergyUse	NT24NG	6.67	0.59
tblEnergyUse	NT24NG	0.07	0.05
tblEnergyUse	T24E	6.11	13.62
tblEnergyUse	T24E	1.48	8.88
tblEnergyUse	T24E	0.32	7.16
tblEnergyUse	T24NG	16.31	2.31
tblEnergyUse	T24NG	19.71	1.73
tblEnergyUse	T24NG	3.40	2.27
tblFleetMix	HHD	0.05	0.00

tblFleetMix	HHD	0.05	0.50
tblFleetMix	LDA	0.56	0.50
tblFleetMix	LDA	0.56	0.00
tblFleetMix	LDT1	0.04	0.25
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.19	0.25
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.2020e-003	0.00
tblFleetMix	LHD2	5.2020e-003	0.00
tblFleetMix	MCY	5.5240e-003	0.00
tblFleetMix	MCY	5.5240e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	7.2100e-004	0.00
tblFleetMix	MH	7.2100e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.50
tblFleetMix	OBUS	2.1840e-003	0.00
tblFleetMix	OBUS	2.1840e-003	0.00
tblFleetMix	SBUS	3.2600e-004	0.00
tblFleetMix	SBUS	3.2600e-004	0.00
tblFleetMix	UBUS	2.5610e-003	0.00
tblFleetMix	UBUS	2.5610e-003	0.00
tblLandUse	LandUseSquareFeet	207,080.00	207,084.00
tblLandUse	LandUseSquareFeet	153,980.00	153,978.00
tblLandUse	LandUseSquareFeet	467,200.00	354,000.00
tblLandUse	LotAcreage	4.75	1.34
tblLandUse	LotAcreage	3.53	0.98

tblLandUse	LotAcreage	0.46	0.15
tblLandUse	LotAcreage	0.81	0.83
tblLandUse	LotAcreage	10.51	1.35
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	755.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	2.46	21.83
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	1.00
tblVehicleTrips	SU_TR	1.05	21.83
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	1.00
tblVehicleTrips	WD_TR	11.03	21.83
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	1.00
tblWater	OutdoorWaterUseRate	0.00	22,557,967.30
tblWater	OutdoorWaterUseRate	0.00	22,557,967.30

2.0 Emissions Summary

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	1.7217	1.4000e-004	0.0151	0.0000		5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312		
Energy	4.7700e-003	0.0433	0.0364	2.6000e-004		3.2900e-003	3.2900e-003	3.2900e-003	3.2900e-003	0.0000	1,242.2937	1,242.2937	0.1659	0.0350	1,256.8756		
Mobile	0.9830	1.4750	12.2229	0.0373	3.9757	0.0282	4.0039	1.0576	0.0260	1.0835	0.0000	3,380.2539	3,380.2539	0.0828	0.0000	3,382.3237	
Stationary	4.9600e-003	0.0222	0.0126	2.0000e-005		7.3000e-004	7.3000e-004	7.3000e-004	7.3000e-004	0.0000	2.3000	2.3000	3.2000e-004	0.0000	2.3081		
Waste						0.0000	0.0000	0.0000	0.0000	45.2832	0.0000	45.2832	2.6762	0.0000	112.1873		
Water						0.0000	0.0000	0.0000	0.0000	37.1635	82.9389	120.1024	3.8285	0.0925	243.3794		
Total	2.7144	1.5406	12.2871	0.0376	3.9757	0.0323	4.0079	1.0576	0.0301	1.0876	82.4467	4,707.8158	4,790.2625	6.7538	0.1275	4,997.1053	

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	1.7217	1.4000e-004	0.0151	0.0000		5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312		
Energy	4.77E-03	0.0433	0.0364	2.6000e-004		3.29E-03	3.2900e-003	3.29E-03	3.2900e-003	0.0000	1,242.2937	1,242.2937	0.1659	0.0350	1,256.88		
Mobile	0.9830	1.4750	12.2229	0.0373	3.9757	0.0282	4.0039	1.0576	0.0260	1.0835	0.0000	3,380.2539	3,380.2539	0.0828	0.0000	3,382.3237	
Stationary	4.9600e-003	0.0222	0.0126	2.0000e-005		7.3000e-004	7.3000e-004	7.3000e-004	7.3000e-004	0.0000	2.3000	2.3000	3.2000e-004	0.0000	2.3081		
Waste						0.0000	0.0000	0.0000	0.0000	45.2832	0.0000	45.2832	2.6762	0.0000	112.1873		
Water						0.0000	0.0000	0.0000	0.0000	37.1635	82.9389	120.1024	3.8285	0.0925	243.3794		
Total	2.7144	1.5406	12.2871	0.0376	3.9757	0.0323	4.0079	1.0576	0.0301	1.0876	82.4467	4,707.8158	4,790.2625	6.7538	0.1275	4,997.1053	
	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.9830	1.4750	12.2229	0.0373	3.9757	0.0282	4.0039	1.0576	0.0260	1.0835	0.0000	3,380.2539	3,380.2539	0.0828	0.0000	3,382.3237	
Unmitigated	0.9830	1.4750	12.2229	0.0373	3.9757	0.0282	4.0039	1.0576	0.0260	1.0835	0.0000	3,380.2539	3,380.2539	0.0828	0.0000	3,382.3237	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
General Office Building	4,520.56	4,520.56	4520.56		10,803.012		10,803.012
Parking Lot	0.00	0.00	0.00				
Research & Development	0.00	0.00	0.00				
Unenclosed Parking with Elevator	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	20.00	20.00	20.00		58,390		58,390
Total	4,540.56	4,540.56	4,540.56		10,861,403		10,861,403

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unenclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.500000	0.250000	0.250000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721
Research & Development	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721
Unenclosed Parking with Elevator	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500000	0.500000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	tons/yr										MT/yr						
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	1,195.1167	1,195.1167	0.1650	0.0342	1,209.4183	
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	1,195.1167	1,195.1167	0.1650	0.0342	1,209.4183	
NaturalGas Mitigated	4.7700e-003	0.0433	0.0364	2.6000e-004		3.2900e-003	3.2900e-003	3.2900e-003	3.2900e-003	0.0000	47.1770	47.1770	9.0000e-004	8.6000e-004	47.4574		
NaturalGas Unmitigated	4.7700e-003	0.0433	0.0364	2.6000e-004		3.2900e-003	3.2900e-003	3.2900e-003	3.2900e-003	0.0000	47.1770	47.1770	9.0000e-004	8.6000e-004	47.4574		

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						
General Office Building	480435	2.5900e-003	0.0236	0.0198	1.4000e-004		1.7900e-003	1.7900e-003		1.7900e-003	1.7900e-003	0.0000	25.6378	25.6378	4.9000e-004	4.7000e-004	25.7902	
Parking Lot	0	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	
Research & Development	357229	1.9300e-003	0.0175	0.0147	1.1000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	19.0631	19.0631	3.7000e-004	3.5000e-004	19.1764	
Unclosed Parking with Elevation	0	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	
Unrefrigerated Warehouse-No Rail	46400	2.5000e-004	2.2700e-003	1.9100e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4761	2.4761	5.0000e-005	5.0000e-005	2.4908	
Total		4.7700e-003	0.0433	0.0364	2.6000e-004		3.2900e-003	3.2900e-003		3.2900e-003	3.2900e-003	0.0000	47.1770	47.1770	9.1000e-004	8.7000e-004	47.4574	

Mitigated

	Natural Gas 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					
General Office Building	480435	2.5900e-003	0.0236	0.0198	1.4000e-004		1.7900e-003	1.7900e-003		1.7900e-003	1.7900e-003	0.0000	25.6378	25.6378	4.9000e-004	4.7000e-004	25.7902	
Parking Lot	0	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	
Research & Development	357229	1.9300e-003	0.0175	0.0147	1.1000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	19.0631	19.0631	3.7000e-004	3.5000e-004	19.1764	
Unenclosed Parking with <small>Flammable</small>	0	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	
Unrefrigerated Warehouse-No <small>Rail</small>	46400	2.5000e-004	2.2700e-003	1.9100e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4761	2.4761	5.0000e-005	5.0000e-005	2.4908	
Total		4.7700e-003	0.0433	0.0364	2.6000e-004		3.2900e-003	3.2900e-003		3.2900e-003	3.2900e-003	0.0000	47.1770	47.1770	9.1000e-004	8.7000e-004	47.4574	

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	6.43824e+006	613.2708	0.0847	0.0175	620.6096
Parking Lot	12600	1.2002	1.7000e-004	3.0000e-005	1.2146
Research & Development	4.78718e+006	455.9996	0.0630	0.0130	461.4564
Unenclosed Parking with <small>Flammable</small>	686760	65.4169	9.0300e-003	1.8700e-003	66.1997
Unrefrigerated Warehouse-No <small>Rail</small>	621800	59.2292	8.1800e-003	1.6900e-003	59.9380
Total		1,195.1167	0.1650	0.0341	1,209.418
					3

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	6.43824e+006	613.2708	0.0847	0.0175	620.6096
Parking Lot	12600	1.2002	1.7000e-004	3.0000e-005	1.2146
Research & Development	4.78718e+006	455.9996	0.0630	0.0130	461.4564
Unenclosed Parking with Fumigation	686760	65.4169	9.0300e-003	1.8700e-003	66.1997
Unrefrigerated Warehouse-No Rail	621800	59.2292	8.1800e-003	1.6900e-003	59.9380
Total		1,195.1167	0.1650	0.0341	1,209.4183

6.0 Area Detail

6.1 Mitigation Measures Area

	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	1.7217	1.4000e-004	0.0151	0.0000		5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312	
Unmitigated	1.7217	1.4000e-004	0.0151	0.0000		5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312	

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	0.2068						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5135						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4000e-003	1.4000e-004	0.0151	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312
Total	1.7217	1.4000e-004	0.0151	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312

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	0.2068						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5135						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.4000e-003	1.4000e-004	0.0151	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312
Total	1.7217	1.4000e-004	0.0151	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	120.1024	3.8285	0.0925	243.3794
Unmitigated	120.1024	3.8285	0.0925	243.3794

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	36.8051 / 22.558	38.1673	1.2030	0.0291	76.9054
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Research & Development	75.711 / 22.558	70.5633	2.4735	0.0596	150.1556
Unenclosed Parking with Elamator	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No	4.625 / 22.558	11.3717	0.1521	3.8400e-003	16.3183
Total		120.1024	3.8285	0.0925	243.3794

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	36.8051 / 22.558	38.1673	1.2030	0.0291	76.9054
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Research & Development	75.711 / 22.558	70.5633	2.4735	0.0596	150.1556
Unenclosed Parking with Elamator	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No	4.625 / 22.558	11.3717	0.1521	3.8400e-003	16.3183
Total		120.1024	3.8285	0.0925	243.3794

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated	45.2832	2.6762	0.0000	112.1873
Unmitigated	45.2832	2.6762	0.0000	112.1873

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use					
	tons	MT/yr			
General Office Building	192.58	39.0920	2.3103	0.0000	96.8488
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Research & Development	11.7	2.3750	0.1404	0.0000	5.8840
Unenclosed Parking with Fences	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	18.8	3.8162	0.2255	0.0000	9.4546
Total		45.2832	2.6762	0.0000	112.1873

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	192.58	39.0920	2.3103	0.0000	96.8488
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Research & Development	11.7	2.3750	0.1404	0.0000	5.8840
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	18.8	3.8162	0.2255	0.0000	9.4546
Total		45.2832	2.6762	0.0000	112.1873

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
Emergency Generator	1	0	8	755	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	tons/yr												MT/yr			
Emergency Generator - Diesel (750,0000 LHP)	4.9600e-003	0.0222	0.0126	2.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.3000	2.3000	3.2000e-004	0.0000	2.3081
Total	4.9600e-003	0.0222	0.0126	2.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.3000	2.3000	3.2000e-004	0.0000	2.3081

11.0 Vegetation

10x Genomics Redevelopment Project - Project Operations Year 2022 - Alameda County, Summer

10x Genomics Redevelopment Project - Project Operations Year 2022

Alameda County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	207.08	1000sqft	1.34	207,084.00	0
Research & Development	153.98	1000sqft	0.98	153,978.00	0
Unrefrigerated Warehouse-No Rail	20.00	1000sqft	0.15	20,000.00	0
Parking Lot	90.00	Space	0.83	36,000.00	0
Unenclosed Parking with Elevator	1,168.00	Space	1.35	354,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 9

Energy Use - CalEEMod Note 10

Water And Wastewater - CalEEMod Note 13

Fleet Mix - CalEEMod Note 9

Stationary Sources - Emergency Generators and Fire Pumps - CalEEMod Note 11

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	0.00
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	LightingElect	2.14	0.00
tblEnergyUse	NT24E	7.84	17.47
tblEnergyUse	NT24E	3.70	22.21
tblEnergyUse	NT24E	1.07	23.93
tblEnergyUse	NT24NG	0.06	0.01
tblEnergyUse	NT24NG	6.67	0.59
tblEnergyUse	NT24NG	0.07	0.05
tblEnergyUse	T24E	6.11	13.62
tblEnergyUse	T24E	1.48	8.88
tblEnergyUse	T24E	0.32	7.16
tblEnergyUse	T24NG	16.31	2.31
tblEnergyUse	T24NG	19.71	1.73
tblEnergyUse	T24NG	3.40	2.27
tblFleetMix	HHD	0.05	0.00

tblFleetMix	HHD	0.05	0.50
tblFleetMix	LDA	0.56	0.50
tblFleetMix	LDA	0.56	0.00
tblFleetMix	LDT1	0.04	0.25
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.19	0.25
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.2020e-003	0.00
tblFleetMix	LHD2	5.2020e-003	0.00
tblFleetMix	MCY	5.5240e-003	0.00
tblFleetMix	MCY	5.5240e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	7.2100e-004	0.00
tblFleetMix	MH	7.2100e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.50
tblFleetMix	OBUS	2.1840e-003	0.00
tblFleetMix	OBUS	2.1840e-003	0.00
tblFleetMix	SBUS	3.2600e-004	0.00
tblFleetMix	SBUS	3.2600e-004	0.00
tblFleetMix	UBUS	2.5610e-003	0.00
tblFleetMix	UBUS	2.5610e-003	0.00
tblLandUse	LandUseSquareFeet	207,080.00	207,084.00
tblLandUse	LandUseSquareFeet	153,980.00	153,978.00
tblLandUse	LandUseSquareFeet	467,200.00	354,000.00
tblLandUse	LotAcreage	4.75	1.34
tblLandUse	LotAcreage	3.53	0.98

tblLandUse	LotAcreage	0.46	0.15
tblLandUse	LotAcreage	0.81	0.83
tblLandUse	LotAcreage	10.51	1.35
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	755.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	2.46	21.83
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	1.00
tblVehicleTrips	SU_TR	1.05	21.83
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	1.00
tblVehicleTrips	WD_TR	11.03	21.83
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	1.00
tblWater	OutdoorWaterUseRate	0.00	22,557,967.30
tblWater	OutdoorWaterUseRate	0.00	22,557,967.30

2.0 Emissions Summary

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/day											lb/day					
Area	9.4418	1.5300e-003	0.1676	1.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		0.3587	0.3587	9.5000e-004		0.3824	
Energy	0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454	
Mobile	6.6488	7.3846	71.1761	0.2208	22.6955	0.1550	22.8505	6.0197	0.1429	6.1626		22,038.1287	22,038.1287	0.5260		22,051.2787	
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Total	16.1167	7.6236	71.5432	0.2223	22.6955	0.1736	22.8692	6.0197	0.1616	6.1812		22,323.4395	22,323.4395	0.5324	5.2200e-003	22,338.3064	

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/day											lb/day					
Area	9.4418	1.5300e-003	0.1676	1.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		0.3587	0.3587	9.5000e-004		0.3824	
Energy	0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454	
Mobile	6.6488	7.3846	71.1761	0.2208	22.6955	0.1550	22.8505	6.0197	0.1429	6.1626		22,038.1287	22,038.1287	0.5260		22,051.2787	
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Total	16.1167	7.6236	71.5432	0.2223	22.6955	0.1736	22.8692	6.0197	0.1616	6.1812		22,323.4395	22,323.4395	0.5324	5.2200e-003	22,338.3064	

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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/day						
Mitigated	6.6488	7.3846	71.1761	0.2208	22.6955	0.1550	22.8505	6.0197	0.1429	6.1626	22,038.12	22,038.128	0.5260		22,051.27		
Unmitigated	6.6488	7.3846	71.1761	0.2208	22.6955	0.1550	22.8505	6.0197	0.1429	6.1626	22,038.12	22,038.128	0.5260		22,051.27		

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
General Office Building	4,520.56	4,520.56	4520.56	10,803,012		10,803,012	
Parking Lot	0.00	0.00	0.00				
Research & Development	0.00	0.00	0.00				
Unenclosed Parking with Elevator	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	20.00	20.00	20.00	58,390		58,390	
Total	4,540.56	4,540.56	4,540.56	10,861,403		10,861,403	

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unenclosed Parking with	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.500000	0.250000	0.250000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721
Research & Development	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721
Unenclosed Parking with Elevator	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500000	0.500000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	lb/day										lb/day						
NaturalGas Mitigated	0.0261	0.2375	0.1995	1.4200e-003			0.0181	0.0181		0.0181	0.0181	284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454	
NaturalGas Unmitigated	0.0261	0.2375	0.1995	1.4200e-003			0.0181	0.0181		0.0181	0.0181	284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454	

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	lb/day										lb/day					
General Office Building	1316.26	0.0142	0.1291	0.1084	7.7000e-004		9.8100e-003	9.8100e-003		9.8100e-003	9.8100e-003	154.8541	154.8541	2.9700e-003	2.8400e-003	155.7743	
Parking Lot	0	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	
Research & Development	978.709	0.0106	0.0960	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003	115.1423	115.1423	2.2100e-003	2.1100e-003	115.8265	
Unenclosed Parking with Fumigation	0	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	
Unrefrigerated Warehouse-No Rail	127.123	1.3700e-003	0.0125	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	14.9557	14.9557	2.9000e-004	2.7000e-004	15.0446	
Total		0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4700e-003	5.2200e-003	286.6454

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	lb/day										lb/day					
General Office Building	1.31626	0.0142	0.1291	0.1084	7.7000e-004		9.8100e-003	9.8100e-003		9.8100e-003	9.8100e-003	154.8541	154.8541	2.9700e-003	2.8400e-003	155.7743	
Parking Lot	0	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	
Research & Development	0.978709	0.0106	0.0960	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003	115.1423	115.1423	2.2100e-003	2.1100e-003	115.8265	
Unenclosed Parking with Fumigation	0	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	
Unrefrigerated Warehouse-No Rail	0.127123	1.3700e-003	0.0125	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	14.9557	14.9557	2.9000e-004	2.7000e-004	15.0446	
Total		0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4700e-003	5.2200e-003	286.6454

6.0 Area Detail

6.1 Mitigation Measures Area

	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/day					
Mitigated	9.4418	1.5300e-003	0.1676	1.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004	0.3587	0.3587	9.5000e-004			0.3824
Unmitigated	9.4418	1.5300e-003	0.1676	1.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004	0.3587	0.3587	9.5000e-004			0.3824

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	lb/day										lb/day					
Architectural Coating	1.1333						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	8.2929						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	0.0156	1.5300e-003	0.1676	1.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004	0.3587	0.3587	9.5000e-004			0.3824
Total	9.4418	1.5300e-003	0.1676	1.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004	0.3587	0.3587	9.5000e-004			0.3824

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					
Architectural Coating	1.1333						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	8.2929						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	0.0156	1.5300e-003	0.1676	1.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004	0.3587	0.3587	9.5000e-004			0.3824
Total	9.4418	1.5300e-003	0.1676	1.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004	0.3587	0.3587	9.5000e-004			0.3824

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0	8	755	0.73	Diesel

Boilers

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

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

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (750,0000 HP)	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
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

11.0 Vegetation

10x Genomics Redevelopment Project - Project Operations Year 2022 - Alameda County, Winter

10x Genomics Redevelopment Project - Project Operations Year 2022
Alameda County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	207.08	1000sqft	1.34	207,084.00	0
Research & Development	153.98	1000sqft	0.98	153,978.00	0
Unrefrigerated Warehouse-No Rail	20.00	1000sqft	0.15	20,000.00	0
Parking Lot	90.00	Space	0.83	36,000.00	0
Unenclosed Parking with Elevator	1,168.00	Space	1.35	354,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2022
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	210	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 1

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 9

Energy Use - CalEEMod Note 10

Water And Wastewater - CalEEMod Note 13

Fleet Mix - CalEEMod Note 9

Stationary Sources - Emergency Generators and Fire Pumps - CalEEMod Note 11

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	18.00	0.00
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	LightingElect	2.14	0.00
tblEnergyUse	NT24E	7.84	17.47
tblEnergyUse	NT24E	3.70	22.21
tblEnergyUse	NT24E	1.07	23.93
tblEnergyUse	NT24NG	0.06	0.01
tblEnergyUse	NT24NG	6.67	0.59
tblEnergyUse	NT24NG	0.07	0.05
tblEnergyUse	T24E	6.11	13.62
tblEnergyUse	T24E	1.48	8.88
tblEnergyUse	T24E	0.32	7.16
tblEnergyUse	T24NG	16.31	2.31
tblEnergyUse	T24NG	19.71	1.73
tblEnergyUse	T24NG	3.40	2.27
tblFleetMix	HHD	0.05	0.00
tblFleetMix	HHD	0.05	0.50
tblFleetMix	LDA	0.56	0.50
tblFleetMix	LDA	0.56	0.00
tblFleetMix	LDT1	0.04	0.25
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.19	0.25
tblFleetMix	LDT2	0.19	0.00

tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.2020e-003	0.00
tblFleetMix	LHD2	5.2020e-003	0.00
tblFleetMix	MCY	5.5240e-003	0.00
tblFleetMix	MCY	5.5240e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	7.2100e-004	0.00
tblFleetMix	MH	7.2100e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	MHD	0.02	0.50
tblFleetMix	OBUS	2.1840e-003	0.00
tblFleetMix	OBUS	2.1840e-003	0.00
tblFleetMix	SBUS	3.2600e-004	0.00
tblFleetMix	SBUS	3.2600e-004	0.00
tblFleetMix	UBUS	2.5610e-003	0.00
tblFleetMix	UBUS	2.5610e-003	0.00
tblLandUse	LandUseSquareFeet	207,080.00	207,084.00
tblLandUse	LandUseSquareFeet	153,980.00	153,978.00
tblLandUse	LandUseSquareFeet	467,200.00	354,000.00
tblLandUse	LotAcreage	4.75	1.34
tblLandUse	LotAcreage	3.53	0.98
tblLandUse	LotAcreage	0.46	0.15
tblLandUse	LotAcreage	0.81	0.83
tblLandUse	LotAcreage	10.51	1.35
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	210
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	755.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.00

tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	2.46	21.83
tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	1.00
tblVehicleTrips	SU_TR	1.05	21.83
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	1.00
tblVehicleTrips	WD_TR	11.03	21.83
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	1.00
tblWater	OutdoorWaterUseRate	0.00	22,557,967.30
tblWater	OutdoorWaterUseRate	0.00	22,557,967.30

2.0 Emissions Summary

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/day										lb/day						
Area	9.4418	1.5300e-003	0.1676	1.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004	0.3587	0.3587	9.5000e-004			0.3824	
Energy	0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181	284.9521	284.9521	5.4600e-003	5.2200e-003		286.6454	
Mobile	5.2630	8.6891	70.1328	0.2038	22.6955	0.1551	22.8506	6.0197	0.1430	6.1627	20,334.80	20,334.806	0.5086			20,347.52	
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	
Total	14.7309	8.9281	70.4998	0.2052	22.6955	0.1738	22.8693	6.0197	0.1617	6.1813	20,620.11	68	20,620.116	8	0.5150	5.2200e-003	20,634.5494

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/day										lb/day						
Area	9.4418	1.5300e-003	0.1676	1.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		0.3587	0.3587	9.5000e-004		0.3824	
Energy	0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454	
Mobile	5.2630	8.6891	70.1328	0.2038	22.6955	0.1551	22.8506	6.0197	0.1430	6.1627		20,334.80	20,334.806	0.5086		20,347.52	
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Total	14.7309	8.9281	70.4998	0.2052	22.6955	0.1738	22.8693	6.0197	0.1617	6.1813		20,620.11	20,620.116	0.5150	5.2200e-003	20,634.54	
	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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/day						
Mitigated	5.2630	8.6891	70.1328	0.2038	22.6955	0.1551	22.8506	6.0197	0.1430	6.1627		20,334.80	20,334.806	0.5086		20,347.52	
Unmitigated	5.2630	8.6891	70.1328	0.2038	22.6955	0.1551	22.8506	6.0197	0.1430	6.1627		20,334.80	20,334.806	0.5086		20,347.52	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
General Office Building	4,520.56	4,520.56	4520.56		10,803,012		10,803,012
Parking Lot	0.00	0.00	0.00				
Research & Development	0.00	0.00	0.00				
Unenclosed Parking with Elevator	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	20.00	20.00	20.00		58,390		58,390
Total	4,540.56	4,540.56	4,540.56		10,861,403		10,861,403

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unenclosed Parking with	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.500000	0.250000	0.250000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721
Research & Development	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721
Unenclosed Parking with Elevator	0.560371	0.039285	0.190378	0.108244	0.016023	0.005202	0.023981	0.045200	0.002184	0.002561	0.005524	0.000326	0.000721
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500000	0.500000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	lb/day										lb/day						
NaturalGas Mitigated	0.0261	0.2375	0.1995	1.4200e-003			0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454
NaturalGas Unmitigated	0.0261	0.2375	0.1995	1.4200e-003			0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454

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	lb/day										lb/day						
General Office Building	1316.26	0.0142	0.1291	0.1084	7.7000e-004		9.8100e-003	9.8100e-003		9.8100e-003	9.8100e-003		154.8541	154.8541	2.9700e-003	2.8400e-003	155.7743	
Parking Lot	0	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	
Research & Development	978.709	0.0106	0.0960	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003		115.1423	115.1423	2.2100e-003	2.1100e-003	115.8265	
Unenclosed Parking with Elevation	0	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	
Unrefrigerated Warehouse-No Rail	127.123	1.3700e-003	0.0125	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004		14.9557	14.9557	2.9000e-004	2.7000e-004	15.0446	
Total		0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4700e-003	5.2200e-003	286.6454	

Mitigated

	Natural Gas 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/day										lb/day						
General Office Building	1.31626	0.0142	0.1291	0.1084	7.7000e-004		9.8100e-003	9.8100e-003		9.8100e-003	9.8100e-003		154.8541	154.8541	2.9700e-003	2.8400e-003	155.7743	
Parking Lot	0	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	
Research & Development	0.978709	0.0106	0.0960	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003		115.1423	115.1423	2.2100e-003	2.1100e-003	115.8265	
Unenclosed Parking with Flammable	0	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	
Unrefrigerated Warehouse-No Rail	0.127123	1.3700e-003	0.0125	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004		14.9557	14.9557	2.9000e-004	2.7000e-004	15.0446	
Total		0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4700e-003	5.2200e-003	286.6454	

6.0 Area Detail

6.1 Mitigation Measures Area

	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/day						
Mitigated	9.4418	1.5300e-003	0.1676	1.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		0.3587	0.3587	9.5000e-004		0.3824	
Unmitigated	9.4418	1.5300e-003	0.1676	1.0000e-005		6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		0.3587	0.3587	9.5000e-004		0.3824	

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	lb/day										lb/day					
Architectural Coating	1.1333						0.0000	0.0000		0.0000			0.0000			0.0000
Consumer Products	8.2929						0.0000	0.0000		0.0000			0.0000			0.0000
Landscaping	0.0156	1.5300e-003	0.1676	1.0000e-005			6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		0.3587	0.3587	9.5000e-004	0.3824
Total	9.4418	1.5300e-003	0.1676	1.0000e-005			6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		0.3587	0.3587	9.5000e-004	0.3824

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					
Architectural Coating	1.1333						0.0000	0.0000		0.0000			0.0000			0.0000
Consumer Products	8.2929						0.0000	0.0000		0.0000			0.0000			0.0000
Landscaping	0.0156	1.5300e-003	0.1676	1.0000e-005			6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		0.3587	0.3587	9.5000e-004	0.3824
Total	9.4418	1.5300e-003	0.1676	1.0000e-005			6.0000e-004	6.0000e-004		6.0000e-004	6.0000e-004		0.3587	0.3587	9.5000e-004	0.3824

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0	8	755	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type	lb/day										lb/day					
Emergency Generator - Diesel (750 - 9999 HP)	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
Total	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

11.0 Vegetation

10x Genomics Redevelopment Project - Project Operations Year 2030 - Alameda County, Annual

10x Genomics Redevelopment Project - Project Operations Year 2030
Alameda County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	207.08	1000sqft	1.34	207,084.00	0
Research & Development	153.98	1000sqft	0.98	153,978.00	0
Unrefrigerated Warehouse-No Rail	20.00	1000sqft	0.15	20,000.00	0
Parking Lot	90.00	Space	0.83	36,000.00	0
Unenclosed Parking with Elevator	1,168.00	Space	1.35	354,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	184	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 12

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 9

Energy Use - CalEEMod Note 10

Water And Wastewater - CalEEMod Note 13

Fleet Mix - CalEEMod Note 9

Stationary Sources - Emergency Generators and Fire Pumps - CalEEMod Note 12

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	18.00	0.00
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	LightingElect	2.14	0.00
tblEnergyUse	NT24E	7.84	17.47
tblEnergyUse	NT24E	3.70	22.21
tblEnergyUse	NT24E	1.07	23.93
tblEnergyUse	NT24NG	0.06	0.01
tblEnergyUse	NT24NG	6.67	0.59
tblEnergyUse	NT24NG	0.07	0.05
tblEnergyUse	T24E	6.11	13.62
tblEnergyUse	T24E	1.48	8.88
tblEnergyUse	T24E	0.32	7.16
tblEnergyUse	T24NG	16.31	2.31
tblEnergyUse	T24NG	19.71	1.73
tblEnergyUse	T24NG	3.40	2.27
tblFleetMix	HHD	0.05	0.00
tblFleetMix	HHD	0.05	0.50
tblFleetMix	LDA	0.57	0.50
tblFleetMix	LDA	0.57	0.00
tblFleetMix	LDT1	0.04	0.25
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.19	0.25
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	5.0680e-003	0.00
tblFleetMix	LHD2	5.0680e-003	0.00

tblFleetMix	MCY	5.3050e-003	0.00
tblFleetMix	MCY	5.3050e-003	0.00
tblFleetMix	MDV	0.10	0.00
tblFleetMix	MDV	0.10	0.00
tblFleetMix	MH	6.4400e-004	0.00
tblFleetMix	MH	6.4400e-004	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.50
tblFleetMix	OBUS	2.2800e-003	0.00
tblFleetMix	OBUS	2.2800e-003	0.00
tblFleetMix	SBUS	3.8900e-004	0.00
tblFleetMix	SBUS	3.8900e-004	0.00
tblFleetMix	UBUS	1.7700e-003	0.00
tblFleetMix	UBUS	1.7700e-003	0.00
tblLandUse	LandUseSquareFeet	207,080.00	207,084.00
tblLandUse	LandUseSquareFeet	153,980.00	153,978.00
tblLandUse	LandUseSquareFeet	467,200.00	354,000.00
tblLandUse	LotAcreage	4.75	1.34
tblLandUse	LotAcreage	3.53	0.98
tblLandUse	LotAcreage	0.46	0.15
tblLandUse	LotAcreage	0.81	0.83
tblLandUse	LotAcreage	10.51	1.35
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	184
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	755.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	2.46	21.83

tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	1.00
tblVehicleTrips	SU_TR	1.05	21.83
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	1.00
tblVehicleTrips	WD_TR	11.03	21.83
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	1.00
tblWater	OutdoorWaterUseRate	0.00	22,557,967.30
tblWater	OutdoorWaterUseRate	0.00	22,557,967.30

2.0 Emissions Summary

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	1.7217	1.3000e-004	0.0150	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312
Energy	4.7700e-003	0.0433	0.0364	2.6000e-004		3.2900e-003	3.2900e-003		3.2900e-003	3.2900e-003	0.0000	1,094.326	1,094.3269	0.1659	0.0350	1,108.908
Mobile	0.5219	0.7922	6.7616	0.0283	3.9757	0.0197	3.9954	1.0576	0.0181	1.0757	0.0000	2,569.635	2,569.6356	0.0394	0.0000	2,570.621
Stationary	4.9600e-003	0.0222	0.0126	2.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.3000	2.3000	3.2000e-004	0.0000	2.3081
Waste						0.0000	0.0000		0.0000	0.0000	45.2832	0.0000	45.2832	2.6762	0.0000	112.1873
Water						0.0000	0.0000		0.0000	0.0000	37.1635	72.6703	109.8338	3.8285	0.0925	233.1108
Total	2.2533	0.8578	6.8257	0.0286	3.9757	0.0238	3.9995	1.0576	0.0222	1.0798	82.4467	3,738.962	3,821.4087	6.7104	0.1275	4,027.167

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	1.7217	1.3000e-004	0.0150	0.0000		5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312		
Energy	4.7700e-003	0.0433	0.0364	2.6000e-004		3.2900e-003	3.2900e-003	3.2900e-003	3.2900e-003	0.0000	1,094.3269	1,094.3269	0.1659	0.0350	1,108.9088		
Mobile	0.5219	0.7922	6.7616	0.0283	3.9757	0.0197	3.9954	1.0576	0.0181	1.0757	0.0000	2,569.635	2,569.6356	0.0394	0.0000	2,570.6210	
Stationary	4.9600e-003	0.0222	0.0126	2.0000e-005		7.3000e-004	7.3000e-004	7.3000e-004	7.3000e-004	0.0000	2.3000	2.3000	3.2000e-004	0.0000	2.3081		
Waste						0.0000	0.0000	0.0000	0.0000	45.2832	0.0000	45.2832	2.6762	0.0000	112.1873		
Water						0.0000	0.0000	0.0000	0.0000	37.1635	72.6703	109.8338	3.8285	0.0925	233.1108		
Total	2.2533	0.8578	6.8257	0.0286	3.9757	0.0238	3.9995	1.0576	0.0222	1.0798	82.4467	3,738.9620	3,821.4087	6.7104	0.1275	4,027.1671	
	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.5219	0.7922	6.7616	0.0283	3.9757	0.0197	3.9954	1.0576	0.0181	1.0757	0.0000	2,569.635	2,569.6356	0.0394	0.0000	2,570.6210	
Unmitigated	0.5219	0.7922	6.7616	0.0283	3.9757	0.0197	3.9954	1.0576	0.0181	1.0757	0.0000	2,569.635	2,569.6356	0.0394	0.0000	2,570.6210	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT		Annual VMT	
General Office Building	4,520.56	4,520.56	4520.56		10,803.012		10,803.012
Parking Lot	0.00	0.00	0.00				
Research & Development	0.00	0.00	0.00				
Unenclosed Parking with Elevator	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	20.00	20.00	20.00		58,390		58,390
Total	4,540.56	4,540.56	4,540.56		10,861,403		10,861,403

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unenclosed Parking with	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.500000	0.250000	0.250000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644
Research & Development	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644
Unenclosed Parking with Elevator	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500000	0.500000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	tons/yr										MT/yr						
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	1,047.1499	1,047.1499	0.1650	0.0342	1,061.4514	
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	1,047.1499	1,047.1499	0.1650	0.0342	1,061.4514	
NaturalGas Mitigated	4.7700e-003	0.0433	0.0364	2.6000e-004		3.2900e-003	3.2900e-003	3.2900e-003	3.2900e-003	0.0000	47.1770	47.1770	9.0000e-004	8.6000e-004	47.4574		
NaturalGas Unmitigated	4.7700e-003	0.0433	0.0364	2.6000e-004		3.2900e-003	3.2900e-003	3.2900e-003	3.2900e-003	0.0000	47.1770	47.1770	9.0000e-004	8.6000e-004	47.4574		

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						
General Office Building	480435	2.5900e-003	0.0236	0.0198	1.4000e-004		1.7900e-003	1.7900e-003	1.7900e-003	1.7900e-003	0.0000	25.6378	25.6378	4.9000e-004	4.7000e-004	25.7902		
Parking Lot	0	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		
Research & Development	357229	1.9300e-003	0.0175	0.0147	1.1000e-004		1.3300e-003	1.3300e-003	1.3300e-003	1.3300e-003	0.0000	19.0631	19.0631	3.7000e-004	3.5000e-004	19.1764		
Unenclosed Parking with Elevator	0	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		
Unrefrigerated Warehouse-No Pk	46400	2.5000e-004	2.2700e-003	1.9100e-003	1.0000e-005		1.7000e-004	1.7000e-004	1.7000e-004	1.7000e-004	0.0000	2.4761	2.4761	5.0000e-005	5.0000e-005	2.4908		
Total		4.7700e-003	0.0433	0.0364	2.6000e-004		3.2900e-003	3.2900e-003	3.2900e-003	3.2900e-003	0.0000	47.1770	47.1770	9.1000e-004	8.7000e-004	47.4574		

Mitigated

	Natural Gas 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					
General Office Building	480435	2.5900e-003	0.0236	0.0198	1.4000e-004		1.7900e-003	1.7900e-003		1.7900e-003	1.7900e-003	0.0000	25.6378	25.6378	4.9000e-004	4.7000e-004	25.7902	
Parking Lot	0	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	
Research & Development	357229	1.9300e-003	0.0175	0.0147	1.1000e-004		1.3300e-003	1.3300e-003		1.3300e-003	1.3300e-003	0.0000	19.0631	19.0631	3.7000e-004	3.5000e-004	19.1764	
Unenclosed Parking with Flammable Rail	0	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	
Unrefrigerated Warehouse-No Rail	46400	2.5000e-004	2.2700e-003	1.9100e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.4761	2.4761	5.0000e-005	5.0000e-005	2.4908	
Total		4.7700e-003	0.0433	0.0364	2.6000e-004		3.2900e-003	3.2900e-003		3.2900e-003	3.2900e-003	0.0000	47.1770	47.1770	9.1000e-004	8.7000e-004	47.4574	

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	6.43824e+006	537.3421	0.0847	0.0175	544.6809
Parking Lot	12600	1.0516	1.7000e-004	3.0000e-005	1.0660
Research & Development	4.78718e+006	399.5425	0.0630	0.0130	404.9993
Unenclosed Parking with Flammable Rail	686760	57.3177	9.0300e-003	1.8700e-003	58.1005
Unrefrigerated Warehouse-No Rail	621800	51.8961	8.1800e-003	1.6900e-003	52.6048
Total		1,047.1499	0.1650	0.0341	1,061.4514

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	6.43824e+006	537.3421	0.0847	0.0175	544.6809
Parking Lot	12600	1.0516	1.7000e-004	3.0000e-005	1.0660
Research & Development	4.78718e+006	399.5425	0.0630	0.0130	404.9993
Unenclosed Parking with Flame	686760	57.3177	9.0300e-003	1.8700e-003	58.1005
Unrefrigerated Warehouse-No Rail	621800	51.8961	8.1800e-003	1.6900e-003	52.6048
Total		1,047.1499	0.1650	0.0341	1,061.4514

6.0 Area Detail

6.1 Mitigation Measures Area

	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	1.7217	1.3000e-004	0.0150	0.0000		5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312	
Unmitigated	1.7217	1.3000e-004	0.0150	0.0000		5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312	

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	0.2068						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5135						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3700e-003	1.3000e-004	0.0150	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312
Total	1.7217	1.3000e-004	0.0150	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312

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	0.2068						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5135						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.3700e-003	1.3000e-004	0.0150	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312
Total	1.7217	1.3000e-004	0.0150	0.0000		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	0.0293	0.0293	8.0000e-005	0.0000	0.0312

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	109.8338	3.8285	0.0925	233.1108
Unmitigated	109.8338	3.8285	0.0925	233.1108

7.2 Water by Land Use

Unmitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	36.8051 / 22.558	34.8875	1.2030	0.0291	73.6256
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Research & Development	75.711 / 22.558	64.8008	2.4735	0.0596	144.3931
Unenclosed Parking with Elaborate	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No	4.625 / 22.558	10.1455	0.1521	3.8400e-003	15.0921
Total		109.8338	3.8285	0.0925	233.1107

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	36.8051 / 22.558	34.8875	1.2030	0.0291	73.6256
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Research & Development	75.711 / 22.558	64.8008	2.4735	0.0596	144.3931
Unenclosed Parking with Elaborate	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No	4.625 / 22.558	10.1455	0.1521	3.8400e-003	15.0921
Total		109.8338	3.8285	0.0925	233.1107

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated	45.2832	2.6762	0.0000	112.1873
Unmitigated	45.2832	2.6762	0.0000	112.1873

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use					
	tons	MT/yr			
General Office Building	192.58	39.0920	2.3103	0.0000	96.8488
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Research & Development	11.7	2.3750	0.1404	0.0000	5.8840
Unenclosed Parking with Fences	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	18.8	3.8162	0.2255	0.0000	9.4546
Total		45.2832	2.6762	0.0000	112.1873

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	192.58	39.0920	2.3103	0.0000	96.8488
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Research & Development	11.7	2.3750	0.1404	0.0000	5.8840
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	18.8	3.8162	0.2255	0.0000	9.4546
Total		45.2832	2.6762	0.0000	112.1873

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
Emergency Generator	1	0	8	755	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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	
Equipment Type	tons/yr										MT/yr						
Emergency Generator - Diesel (750,000 HP)	4.9600e-003	0.0222	0.0126	2.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.3000	2.3000	3.2000e-004	0.0000	2.3081	
Total	4.9600e-003	0.0222	0.0126	2.0000e-005		7.3000e-004	7.3000e-004		7.3000e-004	7.3000e-004	0.0000	2.3000	2.3000	3.2000e-004	0.0000	2.3081	

11.0 Vegetation

10x Genomics Redevelopment Project - Project Operations Year 2030 - Alameda County, Summer

10x Genomics Redevelopment Project - Project Operations Year 2030

Alameda County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	207.08	1000sqft	1.34	207,084.00	0
Research & Development	153.98	1000sqft	0.98	153,978.00	0
Unrefrigerated Warehouse-No Rail	20.00	1000sqft	0.15	20,000.00	0
Parking Lot	90.00	Space	0.83	36,000.00	0
Unenclosed Parking with Elevator	1,168.00	Space	1.35	354,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	184	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 12

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 9

Energy Use - CalEEMod Note 10

Water And Wastewater - CalEEMod Note 13

Fleet Mix - CalEEMod Note 9

Stationary Sources - Emergency Generators and Fire Pumps - CalEEMod Note 12

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	18.00	0.00
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	LightingElect	2.14	0.00
tblEnergyUse	NT24E	7.84	17.47
tblEnergyUse	NT24E	3.70	22.21
tblEnergyUse	NT24E	1.07	23.93
tblEnergyUse	NT24NG	0.06	0.01
tblEnergyUse	NT24NG	6.67	0.59
tblEnergyUse	NT24NG	0.07	0.05
tblEnergyUse	T24E	6.11	13.62
tblEnergyUse	T24E	1.48	8.88
tblEnergyUse	T24E	0.32	7.16
tblEnergyUse	T24NG	16.31	2.31
tblEnergyUse	T24NG	19.71	1.73
tblEnergyUse	T24NG	3.40	2.27
tblFleetMix	HHD	0.05	0.00
tblFleetMix	HHD	0.05	0.50
tblFleetMix	LDA	0.57	0.50
tblFleetMix	LDA	0.57	0.00
tblFleetMix	LDT1	0.04	0.25
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.19	0.25
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	5.0680e-003	0.00
tblFleetMix	LHD2	5.0680e-003	0.00

tblFleetMix	MCY	5.3050e-003	0.00
tblFleetMix	MCY	5.3050e-003	0.00
tblFleetMix	MDV	0.10	0.00
tblFleetMix	MDV	0.10	0.00
tblFleetMix	MH	6.4400e-004	0.00
tblFleetMix	MH	6.4400e-004	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.50
tblFleetMix	OBUS	2.2800e-003	0.00
tblFleetMix	OBUS	2.2800e-003	0.00
tblFleetMix	SBUS	3.8900e-004	0.00
tblFleetMix	SBUS	3.8900e-004	0.00
tblFleetMix	UBUS	1.7700e-003	0.00
tblFleetMix	UBUS	1.7700e-003	0.00
tblLandUse	LandUseSquareFeet	207,080.00	207,084.00
tblLandUse	LandUseSquareFeet	153,980.00	153,978.00
tblLandUse	LandUseSquareFeet	467,200.00	354,000.00
tblLandUse	LotAcreage	4.75	1.34
tblLandUse	LotAcreage	3.53	0.98
tblLandUse	LotAcreage	0.46	0.15
tblLandUse	LotAcreage	0.81	0.83
tblLandUse	LotAcreage	10.51	1.35
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	184
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	755.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	2.46	21.83

tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	1.00
tblVehicleTrips	SU_TR	1.05	21.83
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	1.00
tblVehicleTrips	WD_TR	11.03	21.83
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	1.00
tblWater	OutdoorWaterUseRate	0.00	22,557,967.30
tblWater	OutdoorWaterUseRate	0.00	22,557,967.30

2.0 Emissions Summary

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/day											lb/day					
Area	9.4414	1.5000e-003	0.1665	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		0.3587	0.3587	9.3000e-004		0.3818	
Energy	0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454	
Mobile	3.6055	4.0207	40.1193	0.1675	22.6956	0.1084	22.8039	6.0197	0.0997	6.1194		16,747.83	16,747.838	0.2527		16,754.15	
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Total	13.0730	4.2597	40.4852	0.1689	22.6956	0.1270	22.8226	6.0197	0.1184	6.1380		17,033.14	17,033.149	0.2591	5.2200e-003	17,041.18	
												94	4			42	

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/day											lb/day					
Area	9.4414	1.5000e-003	0.1665	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		0.3587	0.3587	9.3000e-004		0.3818	
Energy	0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454	
Mobile	3.6055	4.0207	40.1193	0.1675	22.6956	0.1084	22.8039	6.0197	0.0997	6.1194		16,747.83	16,747.838	0.2527		16,754.15	
Stationary	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Total	13.0730	4.2597	40.4852	0.1689	22.6956	0.1270	22.8226	6.0197	0.1184	6.1380		17,033.14	17,033.149	0.2591	5.2200e-003	17,041.18	
												94	4			42	

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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/day						
Mitigated	3.6055	4.0207	40.1193	0.1675	22.6956	0.1084	22.8039	6.0197	0.0997	6.1194	16,747.83 86	16,747.838 6	0.2527		16,754.15 69		
Unmitigated	3.6055	4.0207	40.1193	0.1675	22.6956	0.1084	22.8039	6.0197	0.0997	6.1194	16,747.83 86	16,747.838 6	0.2527		16,754.15 69		

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
General Office Building	4,520.56	4,520.56	4520.56	10,803,012		10,803,012	
Parking Lot	0.00	0.00	0.00				
Research & Development	0.00	0.00	0.00				
Unenclosed Parking with Elevator	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	20.00	20.00	20.00	58,390		58,390	
Total	4,540.56	4,540.56	4,540.56	10,861,403		10,861,403	

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unenclosed Parking with	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.500000	0.250000	0.250000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644
Research & Development	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644
Unenclosed Parking with Elevator	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500000	0.500000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	lb/day										lb/day					
NaturalGas Mitigated	0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181	284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454	
NaturalGas Unmitigated	0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181	284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454	

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	lb/day										lb/day					
General Office Building	1316.26	0.0142	0.1291	0.1084	7.7000e-004		9.8100e-003	9.8100e-003		9.8100e-003	9.8100e-003	154.8541	154.8541	2.9700e-003	2.8400e-003	155.7743	
Parking Lot	0	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	
Research & Development	978.709	0.0106	0.0960	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003	115.1423	115.1423	2.2100e-003	2.1100e-003	115.8265	
Unenclosed Parking with Elimination	0	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	
Unrefrigerated Warehouse-No Rail	127.123	1.3700e-003	0.0125	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	14.9557	14.9557	2.9000e-004	2.7000e-004	15.0446	
Total		0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4700e-003	5.2200e-003	286.6454

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	lb/day										lb/day					
General Office Building	1.31626	0.0142	0.1291	0.1084	7.7000e-004		9.8100e-003	9.8100e-003		9.8100e-003	9.8100e-003	154.8541	154.8541	2.9700e-003	2.8400e-003	155.7743	
Parking Lot	0	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	
Research & Development	0.978709	0.0106	0.0960	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003	115.1423	115.1423	2.2100e-003	2.1100e-003	115.8265	
Unenclosed Parking with Elimination	0	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	
Unrefrigerated Warehouse-No Rail	0.127123	1.3700e-003	0.0125	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	14.9557	14.9557	2.9000e-004	2.7000e-004	15.0446	
Total		0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4700e-003	5.2200e-003	286.6454

6.0 Area Detail

6.1 Mitigation Measures Area

	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/day					
Mitigated	9.4414	1.5000e-003	0.1665	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		0.3587	0.3587	9.3000e-004		0.3818
Unmitigated	9.4414	1.5000e-003	0.1665	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		0.3587	0.3587	9.3000e-004		0.3818

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	lb/day										lb/day					
Architectural Coating	1.1333					0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	
Consumer Products	8.2929					0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	
Landscaping	0.0152	1.5000e-003	0.1665	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		0.3587	0.3587	9.3000e-004		0.3818
Total	9.4414	1.5000e-003	0.1665	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		0.3587	0.3587	9.3000e-004		0.3818

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						
Architectural Coating	1.1333						0.0000	0.0000		0.0000			0.0000			0.0000	
Consumer Products	8.2929						0.0000	0.0000		0.0000			0.0000			0.0000	
Landscaping	0.0152	1.5000e-003	0.1665	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.3587	0.3587	9.3000e-004			0.3818	
Total	9.4414	1.5000e-003	0.1665	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.3587	0.3587	9.3000e-004			0.3818	

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0	8	755	0.73	Diesel

Boilers

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

Equipment Type	Number
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10.1 Stationary Sources

Unmitigated/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	
Equipment Type	lb/day										lb/day						
Emergency Generator - Diesel (750,000 HP)	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	
Total	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000							

11.0 Vegetation

10x Genomics Redevelopment Project - Project Operations Year 2030 - Alameda County, Winter

10x Genomics Redevelopment Project - Project Operations Year 2030
Alameda County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	207.08	1000sqft	1.34	207,084.00	0
Research & Development	153.98	1000sqft	0.98	153,978.00	0
Unrefrigerated Warehouse-No Rail	20.00	1000sqft	0.15	20,000.00	0
Parking Lot	90.00	Space	0.83	36,000.00	0
Unenclosed Parking with Elevator	1,168.00	Space	1.35	354,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	63
Climate Zone	4			Operational Year	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	184	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CalEEMod Note 12

Land Use - CalEEMod Note 2

Construction Phase - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 7

Off-road Equipment - CalEEMod Note 4

Vehicle Trips - CalEEMod Note 9

Energy Use - CalEEMod Note 10

Water And Wastewater - CalEEMod Note 13

Fleet Mix - CalEEMod Note 9

Stationary Sources - Emergency Generators and Fire Pumps - CalEEMod Note 12

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	18.00	0.00
tblEnergyUse	LightingElect	3.88	0.00
tblEnergyUse	LightingElect	3.08	0.00
tblEnergyUse	LightingElect	2.14	0.00
tblEnergyUse	NT24E	7.84	17.47
tblEnergyUse	NT24E	3.70	22.21
tblEnergyUse	NT24E	1.07	23.93
tblEnergyUse	NT24NG	0.06	0.01
tblEnergyUse	NT24NG	6.67	0.59
tblEnergyUse	NT24NG	0.07	0.05
tblEnergyUse	T24E	6.11	13.62
tblEnergyUse	T24E	1.48	8.88
tblEnergyUse	T24E	0.32	7.16
tblEnergyUse	T24NG	16.31	2.31
tblEnergyUse	T24NG	19.71	1.73
tblEnergyUse	T24NG	3.40	2.27
tblFleetMix	HHD	0.05	0.00
tblFleetMix	HHD	0.05	0.50
tblFleetMix	LDA	0.57	0.50
tblFleetMix	LDA	0.57	0.00
tblFleetMix	LDT1	0.04	0.25
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.19	0.25
tblFleetMix	LDT2	0.19	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD1	0.01	0.00
tblFleetMix	LHD2	5.0680e-003	0.00
tblFleetMix	LHD2	5.0680e-003	0.00

tblFleetMix	MCY	5.3050e-003	0.00
tblFleetMix	MCY	5.3050e-003	0.00
tblFleetMix	MDV	0.10	0.00
tblFleetMix	MDV	0.10	0.00
tblFleetMix	MH	6.4400e-004	0.00
tblFleetMix	MH	6.4400e-004	0.00
tblFleetMix	MHD	0.03	0.00
tblFleetMix	MHD	0.03	0.50
tblFleetMix	OBUS	2.2800e-003	0.00
tblFleetMix	OBUS	2.2800e-003	0.00
tblFleetMix	SBUS	3.8900e-004	0.00
tblFleetMix	SBUS	3.8900e-004	0.00
tblFleetMix	UBUS	1.7700e-003	0.00
tblFleetMix	UBUS	1.7700e-003	0.00
tblLandUse	LandUseSquareFeet	207,080.00	207,084.00
tblLandUse	LandUseSquareFeet	153,980.00	153,978.00
tblLandUse	LandUseSquareFeet	467,200.00	354,000.00
tblLandUse	LotAcreage	4.75	1.34
tblLandUse	LotAcreage	3.53	0.98
tblLandUse	LotAcreage	0.46	0.15
tblLandUse	LotAcreage	0.81	0.83
tblLandUse	LotAcreage	10.51	1.35
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	641.35	184
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	755.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	8.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblVehicleTrips	ST_TR	2.46	21.83

tblVehicleTrips	ST_TR	1.90	0.00
tblVehicleTrips	ST_TR	1.68	1.00
tblVehicleTrips	SU_TR	1.05	21.83
tblVehicleTrips	SU_TR	1.11	0.00
tblVehicleTrips	SU_TR	1.68	1.00
tblVehicleTrips	WD_TR	11.03	21.83
tblVehicleTrips	WD_TR	8.11	0.00
tblVehicleTrips	WD_TR	1.68	1.00
tblWater	OutdoorWaterUseRate	0.00	22,557,967.30
tblWater	OutdoorWaterUseRate	0.00	22,557,967.30

2.0 Emissions Summary

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/day											lb/day					
Area	9.4414	1.5000e-003	0.1665	1.0000e-005	5.9000e-004	5.9000e-004	5.9000e-004	5.9000e-004	5.9000e-004	0.3587	0.3587	9.3000e-004	0.3818				
Energy	0.0261	0.2375	0.1995	1.4200e-003	0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454		
Mobile	2.7579	4.6271	38.4562	0.1546	22.6956	0.1084	22.8039	6.0197	0.0997	6.1194	15,457.75	15,457.755	0.2403		15,463.76	23	
Stationary	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		
Total	12.2255	4.8661	38.8222	0.1560	22.6956	0.1270	22.8226	6.0197	0.1184	6.1380	15,743.06	15,743.066	0.2467	5.2200e-003	15,750.78	96	

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/day											lb/day					
Area	9.4414	1.5000e-003	0.1665	1.0000e-005	5.9000e-004	5.9000e-004	5.9000e-004	5.9000e-004	5.9000e-004	0.3587	0.3587	9.3000e-004	0.3818				
Energy	0.0261	0.2375	0.1995	1.4200e-003	0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454		
Mobile	2.7579	4.6271	38.4562	0.1546	22.6956	0.1084	22.8039	6.0197	0.0997	6.1194	15,457.75	15,457.755	0.2403		15,463.76	23	
Stationary	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		
Total	12.2255	4.8661	38.8222	0.1560	22.6956	0.1270	22.8226	6.0197	0.1184	6.1380	15,743.06	15,743.066	0.2467	5.2200e-003	15,750.78	96	

	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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/day					
Mitigated	2.7579	4.6271	38.4562	0.1546	22.6956	0.1084	22.8039	6.0197	0.0997	6.1194	15,457.75 59	15,457.755 9	0.2403		15,463.76 23	
Unmitigated	2.7579	4.6271	38.4562	0.1546	22.6956	0.1084	22.8039	6.0197	0.0997	6.1194	15,457.75 59	15,457.755 9	0.2403		15,463.76 23	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
General Office Building	4,520.56	4,520.56	4520.56	10,803,012		10,803,012	
Parking Lot	0.00	0.00	0.00				
Research & Development	0.00	0.00	0.00				
Unenclosed Parking with Elevator	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	20.00	20.00	20.00	58,390		58,390	
Total	4,540.56	4,540.56	4,540.56	10,861,403		10,861,403	

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Unenclosed Parking with	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.500000	0.250000	0.250000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644
Research & Development	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644
Unenclosed Parking with Elevator	0.566339	0.035990	0.189848	0.102849	0.012430	0.005068	0.026569	0.050520	0.002280	0.001770	0.005305	0.000389	0.000644
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.500000	0.500000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures 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	lb/day										lb/day					
NaturalGas Mitigated	0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181	284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454	
NaturalGas Unmitigated	0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181	284.9521	284.9521	5.4600e-003	5.2200e-003	286.6454	

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	lb/day										lb/day					
General Office Building	1316.26	0.0142	0.1291	0.1084	7.7000e-004		9.8100e-003	9.8100e-003		9.8100e-003	9.8100e-003	154.8541	154.8541	2.9700e-003	2.8400e-003	155.7743	
Parking Lot	0	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	
Research & Development	978.709	0.0106	0.0960	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003	115.1423	115.1423	2.2100e-003	2.1100e-003	115.8265	
Unenclosed Parking with Elimination	0	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	
Unrefrigerated Warehouse-No Rail	127.123	1.3700e-003	0.0125	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	14.9557	14.9557	2.9000e-004	2.7000e-004	15.0446	
Total		0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4700e-003	5.2200e-003	286.6454

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	lb/day										lb/day					
General Office Building	1.31626	0.0142	0.1291	0.1084	7.7000e-004		9.8100e-003	9.8100e-003		9.8100e-003	9.8100e-003	154.8541	154.8541	2.9700e-003	2.8400e-003	155.7743	
Parking Lot	0	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	
Research & Development	0.978709	0.0106	0.0960	0.0806	5.8000e-004		7.2900e-003	7.2900e-003		7.2900e-003	7.2900e-003	115.1423	115.1423	2.2100e-003	2.1100e-003	115.8265	
Unenclosed Parking with Elimination	0	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	
Unrefrigerated Warehouse-No Rail	0.127123	1.3700e-003	0.0125	0.0105	7.0000e-005		9.5000e-004	9.5000e-004		9.5000e-004	9.5000e-004	14.9557	14.9557	2.9000e-004	2.7000e-004	15.0446	
Total		0.0261	0.2375	0.1995	1.4200e-003		0.0181	0.0181		0.0181	0.0181		284.9521	284.9521	5.4700e-003	5.2200e-003	286.6454

6.0 Area Detail

6.1 Mitigation Measures Area

	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/day				
Mitigated	9.4414	1.5000e-003	0.1665	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		0.3587	0.3587	9.3000e-004		0.3818	
Unmitigated	9.4414	1.5000e-003	0.1665	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		0.3587	0.3587	9.3000e-004		0.3818	

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	lb/day										lb/day					
Architectural Coating	1.1333						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	8.2929						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	0.0152	1.5000e-003	0.1665	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		0.3587	0.3587	9.3000e-004		0.3818
Total	9.4414	1.5000e-003	0.1665	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004		0.3587	0.3587	9.3000e-004		0.3818

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						
Architectural Coating	1.1333						0.0000	0.0000		0.0000			0.0000			0.0000	
Consumer Products	8.2929						0.0000	0.0000		0.0000			0.0000			0.0000	
Landscaping	0.0152	1.5000e-003	0.1665	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.3587	0.3587	9.3000e-004			0.3818	
Total	9.4414	1.5000e-003	0.1665	1.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.3587	0.3587	9.3000e-004			0.3818	

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
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0	8	755	0.73	Diesel

Boilers

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

Equipment Type	Number
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10.1 Stationary Sources

Unmitigated/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	
Equipment Type	lb/day										lb/day						
Emergency Generator - Diesel (750,000 HP)	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	
Total	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000							

11.0 Vegetation

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