Center Street Commercial Building
Responses to Comments

MIG - PEMS – Pam Steele, Principal

December 2017

Introduction

An initial study was prepared for the Center Commercial Building ("Project") and circulated with a Notice of Intent to Adopt a Mitigated Negative Declaration (NOI) for a 30-day public review and comment period starting August 24, 2016 and ending September 24, 2016. Comment letters were received and have been evaluated by the Planning Commission and the City Council. Please note that written responses to these comments are not required under the California Environmental Quality Act (CEQA) pursuant to Section 15074; however, to foster public participation and in the interest of cooperative communications with interested parties, the City has elected to prepare written responses to comments. Pursuant to Section 15074(b), "Prior to approving a project, the decision-making body of the lead agency shall consider the proposed negative declaration or mitigated negative declaration together with any comments received during the public review process." Letters received in response to the NOI are summarized in Table 1.

Table 1
Comment Roster

ID	Commenting Entity	Date	Page
A	Sharon Trujillo-Kasner	04/01/15	3
B	Sharon Trujillo-Kasner	08/24/16	6
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D	Connie Kasner	04/02/15	10
E	Karen Renfro	08/25/16	12
F	Karen Renfro, Springbrook Heritage Alliance	09/30/16	14
G	Peter M. Wohlgemuth, Northiside Improvement Association	09/28/16	23
H	Peter M. Wohlgemuth, Northiside Improvement Association	09/29/16	28
I	Richard Drury, Lozeau-Drury, LLP	09/30/16	48
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K	Erin Snyder	09/30/16	77
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The following responses to comments include a summary statement to identify if the response will introduce "new significant information" under any of the four categories identified in Section 15088 et seq. of the California Environmental Quality Act (CEQA) Guidelines or if it does not introduce "new significant information." The four general categories are:

- New significant impacts
- Substantial increases in the severity of impacts
- Feasible alternatives or mitigation that would reduce significant impacts
- Identification of inadequacies in the analysis

Because an MND has been prepared and is anticipated to be adopted for the project, the City has evaluated the comments submitted in light of the "fair argument" standard, pursuant to Public Resources Code §21080(d) and (e). In summary, a "Fair Argument" must be supported by substantial evidence that may include fact, assumptions predicated on fact, and expert opinion. Fair Argument does not include argument, speculation, unsubstantiated opinions, or erroneous evidence. The comments that were submitted generally focused on the issues of truck traffic, loss of open

space and aesthetic character, land use, air quality modeling, and impacts to the Trujillo Adobe. These issues are summarized herein and detailed responses are provided in the body of this document.

The comments submitted do not invalidate the findings in the Initial Study or require additional analysis or mitigation to be incorporated. No new information, new impacts, or deficiencies are identified that cannot be remedied through minor revisions to the Initial Study. Therefore, adoption of an MND remains an appropriate and reasonable determination to be made by the Lead Agency. Responses to comments are provided herein.

Letter A: Sharon Trujillo-Kasner

From: Sharon skasner@sbcglobal.net

*Date: April 1, 2015 at 10:20:03 PM PDT

*To:"rbailey@riversideca.gov" rbailey@riversideca.gov,"mgardner@riversideca.gov" mgardner@riversideca.gov,Mike Soubirous msoubirous@riversideca.gov,Andy Melendrez asmelendrez@riversideca.gov,Jim Perry jperry@riversideca.gov,Chris MacArthur cmacarthur@riversideca.gov, Steve Adams sadams@riversideca.gov, "Paul Davis" pdavis@riversideca.gov

Subject: Opposition to proposed warehouse on Center and Placentia

Reply-To: Sharon skasner@sbcglobal.net

Dear Mayor and Council members,

I am writing to voice my opposition to the development at the pie shaped junction of Center Street and Placentia Lane where a three-story, 1/4 mile long, 308,000 square foot warehouse is proposed. This would take away the possibility of expanding the soccer fields to the north of the current location and put up a wall nearly 1/4 of a mile long facing the sports complex. The last thing we want is to have warehouses being built in an area we are trying to protect. Warehouses do not provide jobs. In this case, will create traffic on residential streets bringing air pollution to a green space. Why would anyone want to build over our water table? We need this land in its natural state to protect our water and the Santa Ana River. A1 A2

I also strongly object to the City of Riverside selling the Riverside Golf Course and the Ab Brown Sports Complex to developers. This land was open grazing, then alfalfa fields to feed the dairy cattle and then golf course and soccer fields and has NEVER been built on. Seriously, are you not thinking clearly or just greedy? A3

Our families arrived in 1842 to protect this land - one hundred and seventy-three years later - we are still trying to protect it! This is rare precious untouched land. Once it is gone, it is gone forever.

Sharon Trujillo-Kasner

Comment A1

The commenter states, "I am writing to voice my opposition to the development at the pie shaped junction of Center Street and Placentia Lane where a three-story ¼-mile long, 308,000 square foot warehouse is proposed. This would take away the possibility of expanding the soccer fields to the north of the current location. The last thing we want is to have warehouses being built in an area we are trying to protect."

Response

This comment has been received and noted. The subject site is currently zoned for industrial uses and is not zoned for park or open space. There are no plans to expand the AB Brown Sports Complex to the north of Placentia Lane. This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. The project is proposed to be developed in accordance with the City General Plan and zoning code. Traffic, recreation, air quality, and water quality were all analyzed and presented in the Initial Study. It was determined that the proposed project would have a less than significant impact on these areas.

Conclusion

No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the IS/MND have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment A2

The commenter states, "Warehouses do not provide jobs in this case, will create traffic on residential streets bringing air pollution to a green space. Why would anyone want to build over our water table? We need this land in its natural state to protect our water and the Santa Ana River."

Response

This comment has been received and noted. This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. The AB Brown Sports Complex and Riverside Golf Course properties are not a part of the project. The project is proposed to be developed in accordance with the City General Plan and zoning code. Traffic, recreation, air quality, and water quality were all analyzed and presented in the Initial Study. It was determined that the proposed project would have a less than significant impact on these areas.

Conclusion

No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the IS/MND have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment A3

The commenter states, "I also strongly object to the City of Riverside selling the Riverside Golf Course and the AB Brown Sports Complex to developers. This land was open grazing, then alfalfa fields to feed the dairy cattle and then golf course and soccer fields and has NEVER been built on. Seriously are you thinking clearly or just greedy?"

Response

This comment has been received and noted. The Riverside Golf Course and AB Brown Sports Complex are not associated with the proposed project. This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. The project is proposed to be developed

in accordance with the City General Plan and zoning code. Traffic, recreation, air quality, and water quality were all analyzed and presented in the Initial Study. It was determined that the proposed project would have a less than significant impact on these areas.

Conclusion

No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the IS/MND have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Letter B: Sharon Trujillo-Kasner

From: Sharon skasner@sbcglobal.net To: Art and Vicky Pena victoriamaepena@gmail.com, Ashley Harmonaharmon23@hotmail.com, Cyndi Trujillo cyndit2000@hotmail.com, darlene elliot darleneelliot@gmail.com, David Trujillodatruji@sbcglobal.net, Deborah Trujillo debbitru@hotmail.com, Denise Boyette Doodette11@gmail.com, Erin Snyderepolcene@juno.com, Ernie and Grace Trujillo eatruj@aol.com, Heidi Laird gob1@earthlink.net, Helen Moraholymora@aol.com, Irene Lozano irenelo92501@yahoo.com, Joe Trujillo JFTrujillo@aol.com, John Gonzaleznoloviv@sbcglobal.net, Kendra Tapia kendragro@yahoo.com, Lenny Trujillo lennytrujillo51@aol.com, Lewis Kasnerlkasner930@gmail.com, Lisa and Jon Hara lisaghara@yahoo.com, Morrie Kasner morriekasner@gmail.com, "nancy. melendez"nancy.melendez@icloud.com, Norman Pena normpena@hotmail.com, Pat and Jay Farrand jfarrand63@sbcglobal.net, Ralph and Helen Linares form1@pacbell.net, Ronald Trujillo rontgrove@yahoo.com, Ronnie and Barbie Baumanbauman1944@aol.com, Ryan Kasner ryanhkasner@gmail.com, Shawn Kasner shawn.kasner@gmail.com, Shawn Kasnerthorin1812@yahoo.com, Springbrook Alliance springbrookheritagealliance@yahoo.com, Suzanne Armassuzanne.armas@yahoo.com, Terri trujillo turiostet@sbcglobal.net, Terry Atencio teeleeatencio@yahoo.com, Vicky Martinezvmartin1519@charter.net, Vivian and Ed Feighner vivianfeighner@gmail.com, "Gardner, Mike" MGardner@riversideca.gov, "Bailey, Rusty" RBailey@riversideca.gov, "Norton, Brian" BNorton@riversideca.gov Cc: Date: Wed, 24 Aug 2016 05:02:47 +0000 Subject: [External] Warehouse update - Center Street Commerce Center P14-1033_P14-1034 Family and friends,

Looks like the warehouse project on Center Street is moving forward. I am sure the residents and the Trujillo family will do all they can to object - but this is Riverside and money talks. How will the adobe survive 500 semi-trucks a day? Only time will tell. We have provided all sorts of materials on how harmful this traffic is for the adobe but it falls on deaf ears. Another sad day for us. B1

Sharon Trujillo-Kasner

Comment B1

The commenter voices their concerns about the effect of truck traffic on the Trujillo Adobe.

Response

This comment has been received and noted. This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. This comment does not provide evidence that the proposed project will have a significant impact on the Trujillo Adobe (Adobe). Chapter 10.56 (Restricted Use of Certain Streets) lists the City streets where trucks of a certain tonnage are prohibited. The proposed project will not generate 500 semi-truck trips per day. According to the project Traffic Impact Analysis, operation of the proposed project will generate approximately 301 truck trips per day, with 57 of those trips occurring during the AM peak hour and 58 occurring during the PM peak hour. Project trip generation based upon rates obtained from the Institute of Transportation Engineers, Trip Generation Manual, 9th Edition, and the City of Fontana, Truck Trip Generation Study, August 2003. Trucks are permitted on both Center Street and Columbia Avenue between Main Street and the I-215 Freeway; however, it should be noted that trucks are not permitted on Main Street south of Columbia Avenue to SR-60. There are no other restrictions on the type and weight of commercial vehicles on these arterials. Trucks associated with the proposed project will have direct access to the site from Center Street, which connects the project with I-215 to the east. While trucks are permitted by the City on Placentia Lane, the project has been designed such that all truck traffic associated with the project will enter and exit from the driveways on Center Street. Moreover, truck traffic is not allowed on Main Street south of Columbia Avenue, meaning the proposed project will not have direct access to SR-60 via Main Street.. As shown in Table 17 (Construction Vibration Impacts) of the IS/MND, construction-related vibration impacts at the single-family home located approximately 640 feet to the northeast of the project site will be greatest from use of vibratory rollers (0.0031 PPV in/sec) during construction. The Trujillo Adobe is located approximately 932 feet to the northeast of the project site, which is a greater distance away from the project site. At this distance, vibratory rollers will produce a PPV of 0.0019 in/sec, which is well below the threshold of 0.10 in/sec for historic and sensitive structures. Therefore, construction-related impacts to the Adobe will be negligible. In terms of operation-related impacts, namely vibration from heavy truck traffic along Center Street, the IS/MND shows that the recommended upper limit of vibration to which ruins and ancient monuments should be subjected is 0.08 PPV in/sec and that truck-related vibration levels of 0.006-0.019 PPV in/sec are unlikely to cause damage to buildings of any type, which would include buildings in the condition of the Trujillo Adobe. The structure is located approximately 88 feet from the centerline of the nearest lane on Center Street. According to Caltrans, the highest truck traffic vibrations generated on freeway shoulders is 0.079 PPV in/sec. At 88 feet, and at speeds well below freeway speeds, the vibration level reaching the Adobe structure is estimated to be 0.015 PPV in/sec. This is well below the upper limit of 0.08 PPV in/sec recommended for ruins and ancient monuments and within the range whereby vibration impacts from trucks on Center Street are unlikely to cause damage to buildings of any type. Given the distance of the Trujillo Adobe to the project site and Center Street, vibration impacts from construction and operation of the proposed project on the Trujillo Adobe will be negligible. As such, the IS/MND appropriately found that the proposed project will not have a significant impact in relation to existing conditions in the project area.

Conclusion

No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the IS/MND have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Letter C: Helen Trujillo Workman Mora

From: holymora@aol.com

Date: April 1, 2015 at 1:07:26 PM PDT

To: mgardner@riversideca.gov, afmelendrez@riversideca.gov, msoubirous@riversideca.gov, pdavis@riversideca.gov,cmacarthur@riversideca.gov, jperry@riversideca.gov, sadams@riversideca.gov

Subject: save the Al Brown Sports Complex & Golf course.

Dears Mayor and Council Members,

I am writing to voice my opposition to the development of the pie shaped junction of Center Street and Placentia Lane where a three-story, 1/4 mile long, 308,000 squarefoot warehouse is proposed. This would take away the possibility of expanding the soccer fields to the north of the current location and put up a wall nearly 1/4 of a mile long facing the sports complex. The last thing we want is to have warehouses being built in an area we are trying to protect. This area is early Riverside and California History dating back to the early 1800's. It is the area of The Trujillo Adobe, Historical Jurupa area, of which the Adobe is a Historical Landmark and part of the Spanish Town Heritage Foundation of Riverside. C1 C2

The Adobe was under the jurisdiction of the Riverside Parks and Recreation and was neglected for over 30 years. Hundreds of descendants and many Riverside residents and Historical Organizations, have been fund raising to restore the Adobe and preserve the surrounding area for a Educational Center for the Riverside Community to enjoy for years to come.

Our Families arrived in 1842 to protect this land and we are still trying to protect it. This is rare precious untouched land and once it is gone it is gone forever. Please read the following letter.

Helen Trujillo Workman Mora Descendant of Lorenzo Trujillo

Comment C1

The commenter states, "I am writing to voice my opposition to the development of the pie shaped junction of Center Street and Placentia Lane where a three-story, ¼-mile long, 308,000 square foot warehouse is proposed. This would take away the possibility of expanding the soccer fields to the north of the current location and put up a wall nearly ¼-mile long facing the sports complex."

Response

This comment has been received and noted. The subject site is currently zoned for industrial uses and is not zoned for park or open space. There is no plan to expand the AB Brown Sports Complex to the north of Placentia Lane. This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. The proposed project is consistent with designated manufacturing and business park uses of the site found in the Zoning Code. Please refer to the response to Comment B1 above regarding vibration impacts to the Trujillo Adobe. Given the distance of the Adobe to the project site and Center Street, vibration impacts from construction and operation of the proposed project on the Trujillo Adobe will be negligible and impacts will be less than significant.

Conclusion

No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the IS/MND have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment C2

The commenter states, "The last thing we want is to have warehouses being built in an area we are trying to protect. This area is early Riverside and California History dating back to the early 1800's. It is the area of the Trujillo Adobe, Historical Jurupa area, of which the Adobe is a Historical Landmark and part of the Spanish Town Heritage Foundation of Riverside."

Response

This comment has been received and noted. According to the project Cultural Resources Report, the site does not contain any resources that meet any of the criteria for listing in the National Register of Historic Places or the California Register of Historic Resources, nor for local designation by the City of Riverside. Therefore, the site does not meet CEQA's definition of a "historical resource". Moreover, as stated in Comment B1 above, the proposed project will not impact any surrounding historic resources including the Trujillo Adobe, the Historic Jurupa area, or the Old Spanish National Historic Trail. The Cultural Resources section of the IS/MND includes mitigation that will include requirements for archaeological sensitivity training for construction personnel, monitoring of construction excavations, the implementation of a treatment plan should archaeological resources be uncovered, and the preparation of a construction monitoring report upon completion. This mitigation is sufficient to ensure that, if buried cultural resources are found, the impacts will be less than significant. This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. The proposed project is consistent with designated manufacturing and business park uses of the site found in the General Plan and Zoning Code.

Conclusion

No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the IS/MND have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Letter D: Connie Kasner

From: morrie kasner morriekasner@gmail.com

Date: April 2, 2015 at 12:03:31 AM PDT

To: rbailey@riversideca.gov, mgardner@riversideca.gov, afmelendrez@riversideca.gov, ms oubirous@riversideca.gov,pdavis@riversideca.gov, cmacarthur@riversideca.gov

Subject: Stop the Warehouse Building

Dear Mayor and Council members,

I am writing to voice my opposition to the development of the pie shaped junction of Center Street and Placentia Lane where a three-story, 1/4 mile long, 308,000 square foot warehouse is proposed. This would take away the possibility of expanding the soccer fields to the north of the current location and put up a wall nearly 1/4 of a mile long facing the sports complex. The last thing we want is to have warehouses being built in an area we are trying to protect. . D1

I also strongly object to the City of Riverside selling the Riverside Golf Course and the Ab Brown Sports Complex to developers. This land was open grazing, then alfalfa fields to feed the dairy cattle and then golf course and soccer fields and has NEVER been built on. D2

Our families arrived in 1842 to protect this land - one hundred and seventy-three years later - we are still trying to protect it! This is rare precious untouched land. Once it is gone, it is gone forever.

Thank you,

Connie Kasner

Comment D1

The commenter states, "I am writing to voice my opposition to the development of the pie shaped junction of Center Street and Placentia Lane where a three-story, ¼-mile long, 308,000 square foot warehouse is proposed. This would take away the possibility of expanding the soccer fields to the north of the current location and put up a wall nearly ¼ of a mile long facing the sports complex. The last thing we want is to have warehouses being built in an area we are trying to protect."

Response

This comment has been received and noted. The subject site is currently zoned for industrial uses and is not zoned for park or open space. There is no plan to expand the AB Brown Sports Complex to the north of Placentia Lane. This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND.

Conclusion

No new or substantial increase in the severity of an impact has been identified. This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the IS/MND have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment D2

The commenter states, "I also strongly object to the City of Riverside selling the Riverside Golf Course and the AB Brown Sports Complex to developers. This land was open grazing, then alfalfa fields to feed the dairy cattle and then golf course and soccer fields and has NEVER been built on."

Response

This comment has been received and noted. The Riverside Golf Course and AB Brown Sports Complex are not associated with the proposed project. This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. Traffic, recreation, air quality, and water quality were all analyzed and presented in the Initial Study. It was determined that the proposed project would have a less than significant impact on these areas.

Conclusion

No new or substantial increase in the severity of an impact has been identified. This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Letter E: Karen Renfro

From: Karen Renfro springbrookheritagealliance@yahoo.com To: "Norton, Brian" BNorton@riversideca.gov Cc: Date: Thu, 25 Aug 2016 22:11:55 +0000 Subject: [External] Re: FW: City of Riverside - Center Street Commerce Center P14-1033_P14-1034

Dear Mr. Norton:

I notice that in the Center Street Commerce Center CEQA Study, the last sentence of the third paragraph on page 42 makes no logical sense. There appears to be an error.

The sentence reads as follows:

"The density of development in the La Placita area gradually increased during the ensuing decades but despite being annexed by the City of Riverside in 1990, the rural character of the project vicinity has remained largely changed to the present time."

Are they trying to say that it "has remained largely unchanged to the present time" or what?

Can you clarify this for us?

Thank you again for your assistance.

Best wishes,

Karen Renfro

E1

Comment E1

The commenter states, "the last sentence of the third paragraph on page 42 makes no logical sense. There appears to be an error. Are they trying to say that 'it has remained largely unchanged to the present time' or what?"

Response

This comment has been noted and the typo has been corrected. The document now correctly reads, "the rural character of the project vicinity has remained largely unchanged to the present time."

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Letter F: Karen Renfro, Springbrook Heritage Alliance

From: Karen Renfro k.a.renfro7@gmail.com To: "Norton, Brian" BNorton@riversideca.gov Cc: "Brenes, Patricia"PBrenes@riversideca.gov, "White, Ted" TWhite@riversideca.gov, "Gettis, Erin" EGettis@riversideca.gov, "Ramirez, Emilio"ERamirez@riversideca.gov, "Guzman, Rafael" RGuzman@riversideca.gov, "Zelinka, Al" azelinka@riversideca.gov, "Russo, John A." jrusso@riversideca.gov, "Gardner, Mike" MGardner@riversideca.gov, Mark Acosta macosta@scng.com, Alicia Robinsonarobinson@pe.com, "ddanelski@pe.com" ddanelski@pe.com, erin snyder epolcene@juno.com, Wohlgemuth Familypjdnw@yahoo.com, Barbara kwyatt10@att.net, Nancy Melendez nancy.melendez@icloud.com, Hanni Bennetthannibee2015@gmail.com, "highgrovenews@roadrunner.com" highgrovenews@roadrunner.com, Gurumantragkhalsa@nutritionnews.com, Pat Stewart patsiann@pacbell.net, Leonard Trujillo lennytrujillo51@aol.com, Darlene Elliotelliotone@icloud.com, Duran ECAC duran_ECAC@hotmail.com, Colton Wildlands coltonwildlands@gmail.com, "rachael@riversidelandconservancy.org" rachael@riversidelandconservancy.org, "bruce.carver" bruce.carver@armoryband.org, "mtrubidoux@aol.com" mtrubidoux@aol.com, "pld@pldconsulting.net" pld@pldconsulting.net, "tdonahue53@att.net"tdonahue53@att.net, Sharon Mateja smateja@earthlink.net, Alexander King avking@live.com, John Krickjohn.krick@alvord.k12.ca.us, "commissioner@ayso47.org" commissioner@ayso47.org, James Rush jimrush440@gmail.com, "pres@oldriverside.org" pres@oldriverside.org, "riversidehistoricalsociety@gmail.com" riversidehistoricalsociety@gmail.com, Jim Wood minwood2@earthlink.net, Diana Ruiz JediRuiz@aol.com, RayMarilyn Saucedo raymari94@gmail.com, Nick Cataldoyankeenut15@gmail.com, "scott.andrews@yahoo.com" scott.andrews@yahoo.com, K Wright twodogkd@yahoo.com, ponnech ponnech@att.net, Justin Scott-Coe waterscottcoe@gmail.com

Date: Fri, 30 Sep 2016 23:57:52 +0000

Subject: [External] CENTER STREET COMMERCE CENTER INITIAL STUDY & DRAFT MITIGATED NEGATIVE DECLARATION

SPRINGBROOK HERITAGE ALLIANCE Riverside - Colton - Highgrove - Grand Terrace P.O. Box 745, Riverside CA 92522https://www.facebook.com/SpringbrookHeritageAlliance

September 30, 2016

Brian Norton, Senior Planner Community and Economic Development Department City of Riverside 3900 Main Street Riverside, California 92522

CENTER STREET COMMERCE CENTER PROJECT Initial CEQA Study and Draft Mitigated Negative Declaration P14-1033 & P14-1034

Dear Mr. Norton:

Our review of this 928-page document identified a number of serious shortcomings, including errors and misrepresentations of a factual nature that call into question the legitimacy of the CEQA studies and findings of the Mitigated Negative Declaration.

Because of these problems, our ad hoc committee concluded that the document is not a realistic assessment of the site proposed for this project and, if it were, no negative declaration--mitigated or otherwise--would be possible even under the generous allowances of the State Legislature as expressed in Section 21002 of the Public Records Code [1.1 Introduction, p. 2].

Unfortunately, these errors are so numerous there isn't room enough or time to provide an annotated list here. But, we will bring to the City's attention as many items as we can [italics ours]:

There is no reliable relationship between the Table of Contents [i-ii] and the rest of the document whose pages are not consecutively-numbered. Under the heading "List of Exhibits", the Site Plan has no page number--instead there is an a computer-generated editorial note that says "Error! Bookmark not defined." There does not seem to be an entry for project layouts, elevations and other design features. Those that occur in the document are scattered among the separate studies and at least one seems to be incomplete. How the project can be adequately evaluated for its impacts remains a mystery to us. As such, the validity of the 925 pages that follow cannot be assumed; F1

The General Plan Land Use Designation and Zoning District [2.6 & 2.7 Project Description] correctly state that all four parcels on the proposed site are currently zoned BMP-Business and Manufacturing Park but fail to mention the Northside Land Use and Urban Design Element from Riverside's General Plan 2025 (LU 105-110). This policy was adapted from the Northside Community Plan which Riverside City Council approved in 1991 at the request of Northside residents for the purpose of mitigating the negative effects of new BMP zoning by the City and County redevelopment agencies on former agricultural land in the predominantly rural and single-family residential Northside. The General Plan's Land Use and Urban Design Guidelines five major objectives include providing a balanced community "with sufficient office, commercial and industrial uses while preserving the single family residential preeminence of the community", establishing it as a place "in which it is a pleasant place to live, work and play", providing for steady change and improvement to an upgraded model community with a distinct identity", and preserving and promoting "the lower density charm of the Northside F2

Community" (LU 70, 71, 72 & 74). The Northside Land Use and Urban Design Element was adopted before January 23, 2015 when the Transmittal of Materials for this project was issued;

One of its policies calls for the preparation of a neighborhood Specific Plan that "emphasizes the retention of open space and recreational resources" (LU-71.1);

Another policy requires "new development to emphasize views outside of the Northside area and not block existing views" (LU-72.2);

Under 2.8 Project Description [p. 6], there is an unhelpful reference to the Site Plan in Exhibit 2 which we cited in Item #1 above. It also gives technical information that cannot be verified because the related site plan does not appear to exist in the Mitigated Negative Declaration. However, this description does not include the height of the proposed building and we could find no layout showing its elevation although we admit this is something we could have missed given the size of the document. However, under 4.1a Aesthetics [p. 25] the document states that the building will have a "maximum height of 47 feet at the northern corners" and that BMP zoning for a project on the 15.88 acres proposed limits heights to 45 feet with a 10-foot extension for screening purposes. The size of the site requires consolidation of four smaller parcels to allow for the 308,000 sq.-ft. 47-foot high building [P14-1034]. A building of this size would of necessity block views of the surrounding vistas in violation of the General Plan guidelines for the Northside, but the Mitigated Negative Declaration concludes there would be no significant impact on the environment;

Under Appendix A: 1.2 Air Quality the Mitigated Negative Declaration states illogically that the project will not result in a substantial increase of toxic or other emissions for a number of factors, even though the location of the proposed building already suffers from a significant increase of toxic emissions caused by existing vehicle traffic under certain weather conditions. This is caused by the lower elevations in the Santa Ana River flood plain where the project to be located, proximity to the Santa Ana River, and air-flow patterns at certain times of the day and night, and certain times of the year. These factors have been common knowledge to Northsiders for generations; F3

Appendix D: Historical/Archeological Resources Survey Report Management Summary states bewilderingly that, based on a 1982 survey, the existing 1920s-era Spanish-Eclectic style house located on one of the parcels to be consolidated does not meet CEQA's definition of a "historical resource" though the site is within known spheres of Cahuilla, Luiseno, Serrano and Tongva occupation or ranging, the 1845 Bandini Donation-Salvador de Jurupa-La Placita, 1870 Spanish Town, 1905 Pellisser Ranch and the original boundary of the 1912 Northside Improvement Association boundaries. F4

There is indeed a potential for discovery of as yet unknown cultural resources, and whatever archeological material there could be lies buried below the topsoil left behind by the wall of water that flooded the Northside in 1862;

In the Introduction [p. 1] of Appendix D, we are told that this study involved a cultural resources records search, historical background research, contact with Native American representatives, and a systematic field survey. In the References [pp 17 &18] there is a bewildering lack of citations from the wealth of material available from the Riverside Public Library's history department, Riverside Metropolitan Museum, Colton City Library, Colton Historical Museum, San Bernardino County Hall of Records Archives, San Bernardino County Library, San Bernardino County Museum, Smiley Library, the historical societies of each of these jurisdictions, or other sources commonly used by local historians and other writers. The failure to check these sources may explain the factual errors in the next item on our list;

In the Initial Study/Mitigated Negative Declaration, 4.2 Cultural Resources [p. 43] regarding Site Evaluation, the third paragraph states "there is a single, potentially historic resource known as the Trujillo Abode [sic] located at 3669 Center Street, approximately one-quarter mile northeast of the proposed Project Site, situated northwest of the intersection of Orange Street and Center Street. The abode [sic] was constructed circa 1862 and it is currently being evaluated by the City for historic status and potential preservation. The Abode [sic] is located outside the project boundaries and will not be modified or otherwise disturbed by construction or operation of the proposed building". The location and distance of the 1862 dwelling is correct. But its identification, status and vulnerability to potential harm are not;

F5

The dwelling is correctly identified as the Trujillo Adobe. Its status at the time this study was written, June 2015, was as follows: Riverside County Landmark RIV009 (1967) and State of California Point of Interest P-75 (1968). However, by August 2016 when the Intent to Adopt a mitigated negative declaration for this project was published by the City's Planning Division, the Trujillo Adobe had been on the City's Historical Register as Historical Landmark #130 (Riverside City Council: Dec. 8, 2016);

The Trujillo Adobe was subsequently donated to the Riverside County Parks Department and became the subject of a permanent exhibit at the Riverside Metropolitan Museum for thirty-five years. The museum still houses the archival treasures that made the exhibit possible, including primary and secondary material, family archival photos, transcripts of interviews of descendants of the original pioneers, early maps of the area, and other items of value to historians. If the research conducted in preparation on the Mitigated Negative Declaration had included any resource triggering a referral to the Museum, all of the information included in our letter (items #10 and #11) would have been

discovered; The story of the New Mexican pioneers from Abiquiu, New Mexico, to Southern California by way of the Old Spanish Trail has been told many times, none so eloquently as the 1977 account by Joyce Carter Vickery in her thesis Defending Eden. The book has been on sale at the museum for most of the intervening decades. In her book, she gives a lively and compelling overview of the settling of the famous Bandini Donation in the mid-1840's. The immigrants founded the first parish church east of Mission San Gabriel, San Salvador de Jurupa, for which the 1852 Township of San Salvador was named. San Salvador was comprised of the villages of Agua Mansa and La Placita de los Trujillos, both established around 1845. Although the homes of the settlers were built on high ground after the Flood of 1862, there may very well be foundations of the early houses on the flood plain under the topsoil. The location of the proposed project is within the boundaries of these early settlements;

In 1870, when Riverside's founders were establishing the new township south of La Placita they discovered native artifacts at a site on Strong and Main Streets known to us as Elliotta Springs. Although these items are not known to us now, it proves that there was native occupation of the Northside. Artifacts from the native and La Placita periods could be found anywhere around the Northside. It is unconscionable to assume that because the research for this Mitigated Negative Declaration did not turn up anything that seemed historically significant that there is nothing;

Because of the geographical and historical link between the Trujillo Adobe and the Old Spanish Trail, the National Park Service has identified it a site with potential for historical development as part of the Old Spanish National Historic Trail--something that elevates the area of old La Placita and its environs above the perceived wasteland of Northside's flood plain.

As time has run out, we must end our letter here. However, we can add more to this list any time, including additional references.

At the very least, this study and its conclusions need to be done over.

Respectfully,

Karen Renfro Co-founder Springbrook Heritage Alliance (951)787-0617 k.a.renfro7@gmail.com

Comment F1

The commenter states that, "there is no reliable relationship between the Table of Contents and the rest of the document whose pages are not consecutively-numbered. There does not seem to be an entry for project layouts, elevations and other design features."

Response

The Table of Contents has been updated to reflect the correct pagination and exhibits for project site plan and elevations have been included in the IS/MND.

Conclusion

This comment does not identify any deficiencies in the analysis in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No other changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment F2

The commenter states that, "The General Plan Land Use Designation and Zoning District [2.6 & 2.7 Project Description] correctly state that all four parcels on the proposed site are currently zoned BMP-Business and Manufacturing Park but fail to mention the Northside Land Use and Urban Design Element from Riverside's General Plan 2025 (LU 105-110). This policy was adapted from the Northside Community Plan which Riverside City Council approved in 1991 at the request of Northside residents for the purpose of mitigating the negative effects of new BMP zoning by the City and County redevelopment agencies on former agricultural land in the predominantly rural and single-family residential Northside. Under 2.8 Project Description [p. 6], there is an unhelpful reference to the Site Plan in Exhibit 2 which we cited in Item #1 above. It also gives technical information that cannot be verified because the related site plan does not appear to exist in the Mitigated Negative Declaration. However, this description does not include the height of the proposed building and we could find no layout showing its elevation although we admit this is something we could have missed given the size of the document. However, under 4.1a Aesthetics [p. 25] the document states that the building will have a "maximum height of 47 feet at the northern corners" and that BMP zoning for a project on the 15.88 acres proposed limits heights to 45 feet with a 10-foot extension for screening purposes. The size of the site requires consolidation of four smaller parcels to allow for the 308,000 sq.-ft. 47-foot high building [P14-1034]. A building of this size would of necessity block views of the surrounding vistas in violation of the General Plan guidelines for the Northside, but the Mitigated Negative Declaration concludes there would be no significant impact on the environment."

Response

The proposed project would not conflict with any plans or programs adopted to avoid or mitigate an environmental impact because it is consistent with the objectives of the 2025 General Plan and the mitigating policies of the General Plan EIR, as summarized below.

The City of Riverside 2025 General Plan Land Use and Urban Design Element establishes the goals, vision, and objectives for development and use of Riverside's industrial land. The General Plan seeks to, "strictly limit any redesignations or rezoning of land from industrial use… [and to] avoid encroachments of incompatible land uses within close proximity of industrial land (Policy LU-24.2)". The General Plan Land Use and Urban Design Element also seeks to, "add to the City's industrial land base where logically and physically possible to do so (Objective LU-25)" and to, "identify opportunities to redevelop older, underutilized properties (Policy LU-25.4)." The proposed project site is located in an area of the City characterized by light industrial and industrial storage uses and would not be an appropriate location for residential or commercial uses. The proposed project site is surrounded by industrial uses to the west, industrial uses and vacant land zoned for industrial use to the north, industrial uses and vacant residences scheduled for demolition to the east, and open space and recreation uses to the south. Moreover, the proposed site is physically capable of supporting the proposed speculative warehouse use and is a logical location for such a use given its proximity to freeways and other industrial land uses. Finally, the proposed project site is an older, underutilized site, part of which

contains abandoned residences and part of which was formerly used for agriculture. As such, the proposed project is appropriate for the proposed site given the goals and objectives for industrial land found in the City's General Plan.

The General Plan sets the guidelines for implementation through the City's Zoning Code (Municipal Code Title 19) where the City adopted regulatory standards for site development. The project site is located in the Business and Manufacturing Park Zone (BMP) and is consistent with the General Plan by permitting a ". . . wide variety of industrial, manufacturing, and support uses . . ." in ". . . a district for low-intensity and low-impact industrial, office, and related uses (Section 19.130.010(A))". The Zoning Codes specifically prohibits residential or heavier industrial uses that generate odors (e.g. animal slaughtering, fat rendering, wood distillation), noise (e.g. gravel excavation, automobile wrecking), dust or smoke (e.g. petroleum refining, steel mills, sand excavation), and other causes of nuisance (Sections 19.130.025(A)(1) through (24)) in implementing the policies of the General Plan.

The MND analyzed the proposed industrial building as an anticipated manufacturing use providing a "worst-case" scenario due to the greater number of trips this type of use typically generates. The project Air Quality and Climate Change Assessment analyzed air quality impacts of both the manufacturing use and the warehouse use based upon a fleet mix that contains heavy-duty trucks, and both were found to have less than significant impacts. The proposed building is a speculative shell that has the potential to accommodate a breadth of uses permitted by the BMP Zone including warehousing and office uses. As is documented in the IS/MND, the proposed building will not result in significant impacts to the environment including those related to odors, dust, smoke, noise, or vibration. The proposed project is permitted, pursuant to Design Review approval, in the BMP zone and by extension is consistent with the General Plan because it will:

1. Accommodate a variety of manufacturing, office, or warehousing uses (General Plan Land Use and Urban Design Element Page LU-141);
2. Not generate nuisance or other impacts (General Plan Land Use and Urban Design Element Page LU-141);
3. Be located in an existing industrial area on a currently underutilized site (General Plan Land Use and Urban Design Element Policy LU-25.4); and
4. Be physically developable on the site pursuant to City zoning requirements (General Plan Land Use and Urban Design Element Page LU-145).

The project is permitted in the BMP zone and is consistent with the General Plan; therefore, any applicable General Plan EIR mitigating policies or measures will apply to the project, as standard practice for all development proposals subject to environmental review. The City's zoning code restricts the building height to 45 feet; however, the code includes an allowance of an additional 10 feet for screening purposes. The proposed building height from floor to roof is between 41 and 43 feet. With inclusion of parapet walls for screening of roof-mounted equipment, the building's final height will be 47 feet. Therefore, the building height is within the allowable range and will be consistent with General Plan standards. The Project Proponent has not submitted a General Plan amendment, variance, or other requests that could modify or recuse the project from the applicability of required mitigation. General Plan 2025 EIR mitigation measures are designed to avoid cumulative and site specific environmental impacts in concert with other applicable regulations required to mitigate or avoid environmental impacts.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment F3

The commenter states that, "Under Appendix A: 1.2 Air Quality the Mitigated Negative Declaration states illogically that the project will not result in a substantial increase of toxic or other emissions for a number of factors, even though the location of the proposed building already suffers from a significant increase of toxic emissions caused by existing vehicle traffic under certain weather conditions. This is caused by the lower elevations in the Santa Ana River flood plain where

the project to be located, proximity to the Santa Ana River, and airflow patterns at certain times of the day and night, and certain times of the year. These factors have been common knowledge to Northsiders for generations."

Response

The air quality analysis provided in the IS/MND shows that the proposed project will not exceed any criteria pollutant or toxic emissions thresholds as established by the SCAQMD. The air quality analysis for the project assessed both manufacturing and warehouse uses and both were determined to have less than significant impacts. The local climate and geography conditions mentioned by the commenter were taken into account in the project's air quality modeling.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment F4

The commenter states that, "Appendix D: Historical/Archeological Resources Survey Report Management Summary states bewilderingly that, based on a 1982 survey, the existing 1920s-era Spanish- Eclectic style house located on one of the parcels to be consolidated does not meet CEQA's definition of a 'historical resource' though the site is within known spheres of Cahuilla, Luiseno, Serrano and Tongva occupation or ranging, the 1845 Bandini Donation-Salvador de Jurupa-La Placita, 1870 Spanish Town, 1905 Pellisser Ranch and the original boundary of the 1912 Northside Improvement Association boundaries. There is indeed a potential for discovery of as yet unknown cultural resources, and whatever archeological material there could be lies buried below the topsoil left behind by the wall of water that flooded the Northside in 1862."

Response

The report is quoting from a survey completed by an outside entity. The survey originally designated the Spanish-Eclectic style house as not having a historical resource value; however, the commenter provides no substantial evidence controverting the 1982 survey. Nevertheless, the cultural resources section of the IS/MND includes mitigation measures that include requirements for archaeological sensitivity training for construction personnel, monitoring of construction excavations, the implementation of a treatment plan should archaeological resources be uncovered, and the preparation of a construction monitoring report upon completion. This mitigation is sufficient to ensure that if buried cultural resources are found, the impacts will be less than significant.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment F5

The commenter states that, "In the Introduction [p. 1] of Appendix D, we are told that this study involved a cultural resources records search, historical background research, contact with Native American representatives, and a systematic field survey. In the References [pp 17 &18] there is a bewildering lack of citations from the wealth of material available from the Riverside Public Library's history department, Riverside Metropolitan Museum, Colton City Library, Colton Historical Museum, San Bernardino County Hall of Records Archives, San Bernardino County Library, San Bernardino County Museum, Smiley Library, the historical societies of each of these jurisdictions, or other sources commonly used by local historians and other writers. The failure to check these sources may explain the factual errors in the next item on

our list... In the IS/MND, 4.2 Cultural Resources [p. 43] regarding Site Evaluation, the third paragraph states "there is a single, potentially historic resource known as the Trujillo Abode [sic] located at 3669 Center Street, approximately one-quarter mile northeast of the proposed Project Site, situated northwest of the intersection of Orange Street and Center Street. The abode [sic] was constructed circa 1862 and it is currently being evaluated by the City for historic status and potential preservation. The Abode [sic] is located outside the project boundaries and will not be modified or otherwise disturbed by construction or operation of the proposed building. The location and distance of the 1862 dwelling is correct. But its identification, status and vulnerability to potential harm are not. The dwelling is correctly identified as the Trujillo Adobe. Its status at the time this study was written, June 2015, was as follows: Riverside County Landmark RIV009 (1967) and State of California Point of Interest P-75 (1968). However, by August 2016 when the Intent to Adopt a mitigated negative declaration for this project was published by the City's Planning Division, the Trujillo Adobe had been on the City's Historical Register as Historical Landmark #130 (Riverside City Council: Dec. 8, 2016). The Trujillo Adobe was subsequently donated to the Riverside County Parks Department and became the subject of a permanent exhibit at the Riverside Metropolitan Museum for thirty-five years. The museum still houses the archival treasures that made the exhibit possible, including primary and secondary material, family archival photos, transcripts of interviews of descendants of the original pioneers, early maps of the area, and other items of value to historians. If the research conducted in preparation on the Mitigated Negative Declaration had included any resource triggering a referral to the Museum, all of the information included in our letter (items #10 and #11) would have been discovered. Although the homes of settlers were built on high ground after the Flood of 1862, there may very well be foundations of the early houses on the flood plain under the topsoil. The location of the proposed project is within the boundaries of these early settlements. In 1870, when Riverside's founders were establishing the new township south of La Placita they discovered native artifacts at a site on Strong and Main Streets known to us as Elliotta Springs. Although these items are not known to us now, it proves that there was native occupation of the Northside. Artifacts from the native and La Placita periods could be found anywhere around the Northside. It is unconscionable to assume that because the research for this Mitigated Negative Declaration did not turn up anything that seemed historically significant that there is nothing. Because of the geographical and historical link between the Trujillo Adobe and the Old Spanish Trail, the National Park Service has identified it a site with potential for historical development as part of the Old Spanish National Historic Trail--something that elevates the area of old La Placita and its environs above the perceived wasteland of Northside's flood plain."

Response

The Historical/Archaeological Resources Survey report was prepared in accordance with accepted protocols for preparation of such report. The proposed project site is located approximately a quarter mile to the west of the Trujillo Adobe in an area characterized by light-industrial, commercial, residential, and vacant land uses. There are also a number of automobile wreckage/storage sites located in the immediate vicinity if the project site. Although the Trujillo Adobe is designated as a site with potential for historical development as part of the Old Spanish Historic National Trail, given its distance from the proposed site and the existing character of the project area, the project will not cause a substantial adverse change in the significance of a historical resource. As shown in the project cultural resources survey, existing on-site buildings do not meet any of the criteria for listing in the National Register of Historic Places or the California Register of Historical Resources, nor for local designation by the City of Riverside. Moreover, the Trujillo Adobe was not identified during the survey on any federal, state, or local historic preservation database. No other potential "historical resources" were encountered during the course of the cultural resources study. The cultural resources section of the IS/MND contains mitigation measures that include requirements for archaeological sensitivity training for construction personnel, monitoring of construction excavations, the implementation of a treatment plan should archaeological resources be uncovered, and the preparation of a construction monitoring report upon completion. This mitigation is sufficient to ensure that impacts to buried cultural resources, if found, will be less than significant. Please, also see Response to Comment C2 above.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the IS/MND have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Letter G: Peter M. Wohlgemuth, Northside Improvement Association

From: Wohlgemuth Family pjdnw@yahoo.com To: "Norton, Brian" BNorton@riversideca.gov Cc: "Gardner, Mike"MGardner@riversideca.gov Date: Wed, 28 Sep 2016 02:58:19 +0000 Subject: [External] Response to Report of Mitigated Negative Declaration P14-1033and P14-1034 Dear Mr. Norton -

Attached find the response of the Northside Improvement Association to the report of Mitigated Negative Declaration for Planning cases P14-1033 and P14-1034 to build a 308,000 square foot warehouse in the Northside neighborhood. Thank you for your attention to this matter.

Peter M.Wohlgemuth, President Northside Improvement Association

Northside Improvement Association P.O. Box 244 Riverside, CA 92502

Organized 1912 • Oldest Community Organization in Riverside

Brian Norton, Senior Planner City of Riverside

Dear Mr. Norton,

On behalf of the Northside Improvement Association, this is our response to the Mitigated Negative Declaration report for Planning Cases P14-1033 and P14-1034 to build a 308,000 square foot warehouse in the Northside Neighborhood.

We reiterate our position that a warehouse project in the Northside Neighborhood would violate Riverside 2025 General Plan provisions LU-72 (providing for steady change and improvement to an upgraded model community) and LU-74 (to preserve and promote the lower density charm of the Northside Community). A warehouse is not in the best interest of a revitalized Northside. G1

The Mitigated Negative Declaration report as presented is poorly written and very difficult to follow. For example, apart from the numerous typographic errors, the sub-sections in Section 4 (Evaluation of Environmental Impacts) are incorrectly numbered and the Appendices each have independent page numbers, making the document difficult to reference. Moreover, there are many internal inconsistencies, errors of fact, and glaring omissions that cast doubt on the accuracy and veracity of the report as a whole. For instance, the proposed building height exceeds the maximum specified in the Riverside Municipal Code 19.130, the proposed project site is in the 100-year floodplain of the Santa Ana River, and the proposed project site is within 100 feet of existing water supply wells (both Garner 'B' Well and Garner 'D' Well). Furthermore, in the Mandatory Findings of Significance section there is reference to Mitigation Measure AQ-1, which does not appear in the Air Quality Section 4.3. The Hydrology and Water Quality Section G2

4.6 repeatedly refers to detailed hydrologic analysis to be found in Section 3.9. However, there is no Section 3.9 anywhere in the report. Also, in Appendix F, sub-Appendices 3 and 8-10, critical soils and hydrologic information are missing (these Appendices are blank).

The Mitigated Negative Declaration report mentions several subsequent compliance plans that will be generated as part of this project (a Stormwater Runoff Management Plan, a Noise Mitigation Plan, and a Storm Water Pollution Prevention Plan). In large part, the Mitigated Negative Declaration is based on the performance of these yet unformulated plans. We feel that these compliance plans should be included in this report in order to justify a determination of a Mitigated Negative Declaration. G3

Some of the data presented in this report are actual measurements, but much are derived from various model outputs. In both cases, there is no way to independently verify the accuracy and/or authenticity of these values. If models are used, there is no way to know if the input parameters truly reflect the on-site conditions or if the model outputs are reasonable. The sources and assumptions surrounding all of these values should be stated explicitly so that decision makers will know that the numbers were not just fabricated. G4

In conclusion, we feel that:

• the quality control of the report production is blatantly lacking; • the report contains numerous errors in the facts; • the report is missing critical analyses; • the report lacks auxiliary compliance plans; • the report presents unverified data, some based on unverified models.

In light of these serious deficiencies, we believe that the report does not support a determination of a Mitigated Negative Declaration.

Sincerely,

Peter M. Wohlgemuth, President Northside Improvement Association

Comment G1

The commenter states that, "We reiterate our position that a warehouse project in the Northside Neighborhood would violate Riverside 2025 General Plan provisions LU-72 (providing for steady change and improvement to an upgraded model community) and LU-74 (to preserve and promote the lower density charm of the Northside Community). A warehouse is not in the best interest of a revitalized Northside."

Response

The proposed warehouse project is consistent with both the BMP-Business and Manufacturing Park land use designation as well as Policy LU-72.8, which encourages appropriate industrial development opportunities. Also, please refer to Response to Comment F2 above.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment G2

The commenter states that, "The Mitigated Negative Declaration report as presented is poorly written and very difficult to follow. For example, apart from the numerous typographic errors, the subsections in Section 4 (Evaluation of Environmental Impacts) are incorrectly numbered and the Appendices each have independent page numbers, making the document difficult to reference. Moreover, there are many internal inconsistencies, errors of fact, and glaring omissions that cast doubt on the accuracy and veracity of the report as a whole. For instance, the proposed building height exceeds the maximum specified in the Riverside Municipal Code 19.130, the proposed project site is in the 100-year floodplain of the Santa Ana River, and the proposed project site is within 100 feet of existing water supply wells (both Garner 'B' Well and Garner 'D' Well). Furthermore, in the Mandatory Findings of Significance section there is reference to Mitigation Measure AQ-1, which does not appear in the Air Quality Section 4.3. The Hydrology and Water Quality Section 4.6 repeatedly refers to detailed hydrologic analysis to be found in Section 3.9. However, there is no Section 3.9 anywhere in the report. Also, in Appendix F, sub-Appendices 3 and 8-10, critical soils and hydrologic information are missing (these Appendices are blank)."

Response

The subsections have been re-numbered and page numbers have been provided for each of the Appendices for ease of reference. The City's zoning code restricts the building height to 45 feet; however, it includes an allowance of an additional 10 feet for screening purposes. The proposed building height from floor to roof is between 41 and 43 feet. With inclusion of parapet walls for screening of roof-mounted equipment, the building's final height will be 47 feet. Therefore, the building height is within the allowable range and will be consistent with General Plan standards. According to FEMA maps, the project site is located in Zone X of "Other Areas", which denotes areas determined to be outside the 0.2% annual chance floodplain. As such, the proposed project is not within a 100-year floodplain and does not place any structures (including housing) within the Santa Ana River floodplain that would impede or redirect flood flows. The commenter correctly states that the project site is within 100 feet of existing water supply wells (Garner B, C, and D Wells). However, the proposed project will not physically alter or otherwise impact the water quality or ability to function of these existing wells. Based upon this comment, the original AQ-1 has been modified. As originally drafted, Mitigation Measure AQ-1 is not needed because there are no significant unavoidable impacts. While no mitigation for air quality is required at this time to reduce project impacts to less than significant levels, Mitigation Measure AQ-1 has been modified to address future possible refrigerated uses of the project**.** In the case of the proposed project changing to a refrigerated warehouse use sometime in the future, Modified Mitigation Measure AQ-1 requires the applicant to conduct a new Air Quality and Climate Change Assessment **to** analyze operational impacts associated with refrigerated uses**.** If the updated Air Quality and Climate Change Assessment were to show that the project with refrigerated uses would exceed established SCAQMD thresholds for criteria operational pollutant emissions, mitigation measures would be required to ensure impacts are reduced to less than significant levels. The modified Mitigation

Measure AQ-1 provides equivalent mitigation when compared with the original Mitigation Measure AQ-1**.** References to Section 3.9 found in the Hydrology and Water Quality Section have been changed to "4.9" to properly reflect the referenced section. Appendix F sub-Appendices 3, 8 and 9 of the project Hydrology Report were, in fact, missing as stated by the commenter. This is due to the fact that the Preliminary Hydrology Report, and not the Final Hydrology Report, was included in the IS/MND appendices. The Final Hydrology Report is included in this Response to Comments (see Attachment B) which includes sub-Appendices 3 (Soils Information), 8 (Source Control), and 9 (Operation and Maintenance). Appendix F, sub-Appendix 10, is not blank as the commenter states. Appendix 10 includes educational materials as part of the project WQMP.

Conclusion

This comment does not identify any deficiencies in the analysis in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No other changes to the IS/MND have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment G3

The commenter states that, "The Mitigated Negative Declaration report mentions several subsequent compliance plans that will be generated as part of this project (a Stormwater Runoff Management Plan, a Noise Mitigation Plan, and a Storm Water Pollution Prevention Plan). In large part, the Mitigated Negative Declaration is based on the performance of these yet unformulated plans. We feel that these compliance plans should be included in this report in order to justify a determination of a Mitigated Negative Declaration."

Response

Compliance plans referenced by the commenter are not required to be provided prior to environmental (CEQA) clearance or entitlement approval. The mitigation referenced by the commenter will be found in the Project SWPPP and will be reflected on construction documents and are reviewed either prior to issuance of grading permits, prior to issuance of building permits, or release of occupancy. They are construction-related documents that will be completed and utilized during project development and in compliance with State and local laws and regulations. Issuance of grading, building, and operation permits is dependent on submission and approval of said plans. While these compliance plans serve as additional mitigation, none of the MND's impact conclusions rely upon imposition of these compliance plans. In other words, even if these compliance plans were not required, all of the impact conclusions of the MND would remain the same.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment G4

The commenter states that, "Some of the data presented in this report are actual measurements, but much are derived from various model outputs. In both cases, there is no way to independently verify the accuracy and/or authenticity of these values. If models are used, there is no way to know if the input parameters truly reflect the on-site conditions or if the model outputs are reasonable. The sources and assumptions surrounding all of these values should be stated explicitly so that decision makers will know that the numbers were not just fabricated."

Response

There are different approaches and assumptions that can be used in projecting the impacts of a development project on the environment, which include the use of computer modeling programs that utilize default inputs. CEQA requires that the project analysis consider only reasonable assumptions supported by substantial evidence in estimating the impacts of a project in order to avoid speculative analysis and conclusions that can be wrought from use of unsubstantiated claims or excessively "worst-case" scenarios. The environmental analysis is required to represent a project as accurately as is feasible for the sake of full disclosure of anticipated impacts. Modeling parameters and significance thresholds, for example, are set by the AQMD. Another example is vibration modeling, in which model inputs and significant thresholds are established by Caltrans. Because the proposed building is speculative in nature, actual tenants are not known; therefore, default output settings were used to analyze different uses including unrefrigerated warehouse and manufacturing. The IS/MND discloses the use of default model input parameters and their assumptions. Such an approach is valid and adequate under CEQA.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Letter H: Peter M. Wohlgemuth, Northside Improvement Association

Response to Planning Cases P14-1033 and P14-1034

Center Street Commerce Building Initial Study Draft Mitigated Negative Declaration

General Comments – These following comments are general in nature and relate to the entire report.

- This document is difficult to read and hard to follow. Many pages are blank: some expressly state that the page is intentionally left blank; some pages are just blank; and some pages are blank where text or graphics were intended to go. This is a particular problem in Appendix F, where critical soils and hydrologic analysis is missing. H1
- Pagination is difficult. Pages 1-101 are fairly straightforward, but then follow the Appendices. Most Appendices are separately numbered, but some have Appendices within Appendices. Most confusing when trying to reference a specific section. H2
- If quality control on the final document is so blatantly lacking, what can be said of the factual information? H3
- In terms of the data itself, some is measured and some are model outputs. In both cases, there is no way to independently verify the accuracy and/or authenticity of these values. If models are used, there is no way to know if the input parameters truly reflect the on-site conditions. We need something more than the implied 'because we say so' or 'we wouldn't lie to you' here. H4
- In several instances the report states that subsequent compliance plans will be developed and submitted to the Planning authorities (a Stormwater Runoff Management Plan; a Noise Mitigation Plan; a Storm Water Pollution Prevention Plan). These as yet unformulated compliance plans then in part form the basis for the determination of a Mitigated Negative Declaration. To avoid this classic case of putting the cart before the horse, these compliance plans should be part of this report. H5
- There are many errors and omissions (documented below) that cast doubt on the accuracy and the veracity of the report as a whole. This is especially true for the hydrologic analyses. H6

Specific Questions – In the order presented in the manuscript, I have the following questions concerning the text and tables.

- On Page 31, Section 4.3.b, if this proposed project is to build a trucking warehouse, how is it that heavy-duty truck trips only account for 16.6% of the increased traffic? H7
- On Page 32/33, Section 4.3.b, in Table 4 the outputs of NOx is listed as Substantial because the modelled outputs levels are very near the threshold value of 55 lb/day. H8

However, in Table 5 the value of PM2.5 is very near the threshold of 8 lb/day, yet this value is not considered Substantial. Why is this?

- On Page 39, Section 4.1.e, the project could have indirect impacts on sensitive communities downstream. However, with SWPPP (not defined) including Best Management Practices, these impacts would be reduced to less than significant impacts. Without documentation, how do we know this? H9
- On Page 39, Section 4.1.d, we are told that the project site is not located within an established or potential wildlife movement corridor. Without documentation, how do we know this? H10
- On Page 40, Section 4.1.f, we are told that no suitable burrowing owl habitat exists on the project site. Without documentation, how do we know this? H11
- On Page 61, Section 4.6.a, operational BMPs will be identified in a Stormwater Runoff Management Plan that will be submitted to the City for review and approval. When will this take place? This compliance plan should be a part of this report. H12
- On Page 61, Section 4.6.e, a holding basin will be constructed that will infiltrate water at a rate of 10 inches per hour. The infiltration rate of the natural soil was never tested (or at least the results appear nowhere in this report), so how do we know that this basin will perform as stated? H13
- On Page 74, Section 4.9.a, mitigation measure N-1 calls for a noise mitigation plan verifying compliance effectiveness shall be prepared and submitted to the Planning Director. When will this take place? This compliance plan should be a part of this report. H14
- On Page 76, Section 4.9.b, Table 17 has the term 'PPVref' as a column heading. Nowhere is this term defined. What is this term and why is it important? H15
- On Page 78, Section 4.9.c, are the values in Table 19 correct? How were they obtained? H16
- On Pages 83/84, Section 4.13.a, what is LOS (level of service)? What are these values based on? What are the criteria? H17
- On Page 84, Section 4.13.a, in the paragraph under Trip Generation, what is the time period of the trips (hour, day, week, month, year)? H18
- On Page 84, Section 4.13.a, in Table 20, what are the units of the Delay columns (second, minute, hour)? Also, where is Highgrove at Center Street? (it is not at Iowa) H19
- In Appendix F, Page 8, what is LID? This term is used repeatedly in this section but is never defined. H20
- In Appendix F, Page 9, Table C.2 lists DMA 2-B with Stabilization Type of a Natural Channel with Depressed Overflow Outlet. However, previously in Appendix F, Page 5, it is stated that there are no natural hydrologic features on the project site. How can these two statements be reconciled? H21
- In Appendix F, Page 14, in Table D.3 DCV Calculations for LID BMPs, the term 'DCV' is never defined. What is this and why is it important? H22

Specific Errors – In the order presented in the manuscript, I have documented the following errors in the text and tables.

- Starting on Page 25, Section 4 (the Evaluation of Environmental Impacts) is broken down into subsections. However, the numbering of these subsections is inconsistent, labelled 4.1, 4.2, 4.3, 4.1, 4.2, 4.3, 4.4, …, 4.15. This makes it extremely difficult to uniquely refer to the many of the subsections. H23
- On Page 25, Section 4.1.a, the report states that the Riverside Municipal Code 19.130 requires a maximum building height of 45 feet. However, the proposed building height would be 47 feet. H24
- On Page 26, Section 4.1.d, the report attests to the 'general urban character of the area' and on Page 39, Section 4.1.c, the proposed project area is described as 'primarily urban'. However, most of the land is vacant and Page 42, Section 4.2.a, comments on the 'rural area of the project vicinity'. The area is either rural or urban. It can't be both. H25
- On Page 48, Section 4.3.b, the report states that the employment of Best Management Practices implemented through a Storm Water Pollution Prevention Plan would be required to limit the extent of eroded materials from a construction site. Furthermore, development of more than one acre would require compliance with the provisions of the NPDES regulations concerning the discharge of eroded materials and pollutants from construction sites and require the preparation and implementation a SWPPP. However, no compliance plan SWPPP has been prepared as part of this report. H26
- On Pages 61/62, Sections 4.6.c/d/e/f, all refer to a Section 3.9.b or 3.9.c where detailed hydrologic analysis was previously performed. However, Section 3.9 does not exist anywhere in this report, either in the main body or in any of the Appendices. Moreover, this detailed hydrologic analysis appears nowhere in the report. H27
- On Page 62, Section 4.6.h, the report states that the project site is not in a 100-year flood hazard area or zone of the Santa Ana River. However, a map from the Army Corps of Engineers clearly shows the project site in the 100-year flood zone. H28
- On Page 62, Section 4.6.i, the report states that the project site is not in a dam inundation area. However, if the Seven Oaks dam on the Santa Ana River were breached, the project site would be affected. H29
- On Page 77, Section 4.9.b, Table 16 does NOT show that 'periodic heavy truck traffic occurring along Center Street will not exceed vibration criteria for structural damage to historic or sensitive buildings' as stated in the report. Rather it shows Distances to Vibration Receptors. H30
- On Pages 91-92, Section 4.15.b, referring to the Mandatory Findings of Significance, under the Air Quality heading the report states that analysis in Section 4.3 found that impacts would be less than significant with mitigation incorporated to reduce operational H31

NOx emissions. Page 92 specifically refers to Mitigation Measure AQ-1. However, no such mitigation measure appears in Section 4.3 or any other section of the report. I

- In Appendix C, Figure 6, a Soils Map of the vicinity, the main soil type of the project area (SfA) is not listed in the map legend with a thumbnail description of the soil characteristics. H32
- In Appendix F, Page 12, Table D.1 states that the project site is not located within 100 feet of a water supply well. However, just across Placentia Lane from the project site is Garner 'B' Well and Garner 'D' Well. H33
- In Appendix F, Page 14, Table D.3 – DCV Calculations, the parameters for DMA Runoff Factors and Design Storm are taken from a WQMP Guidance Document which is not provided. We cannot evaluate the calculations if the parameters are not documented. H34
- In Appendix F, in the Water Quality Management Plan Exhibit, the Best Management Practices map legend lists the infiltration basin (1) as a proposed infiltration trench (5). H35
- In Appendix F, Page 23, Appendix 2, the Grading and Drainage Plans are unreadable. H36
- In Appendix F, Page 24, Appendix 3, Soils Information – Geotechnical Study and Other Infiltration Testing Data, the page is blank. Critical infiltration data (and presumably other soils data) are missing. H37
- In Appendix F, Pages 29-31, Appendix 8-10, the pages are blank. The Pollution Sources/Source Control Checklist is missing. The Operational and Maintenance Plan and Documentation of Finance, Maintenance and Recording Mechanisms is missing. The Best Management Practices Fact Sheets, Maintenance Guidelines and Other End-User BMP Information is missing. H38

In conclusion, I feel that:

- the quality control of the report production is blatantly lacking;
- the report contains numerous errors in the facts;
- the report is missing critical analyses;
- the report lacks auxiliary compliance plans;
- the report presents unverified data, some based on unverified model inputs. H39

In light of these serious deficiencies, I believe that the report does not support a determination of a Mitigated Negative Declaration.

Sincerely,

Pete Wohlgemuth

Comment H1

The commenter states, "This document is difficult to read and hard to follow. Many pages are blank: some expressly state that the page is intentionally left blank; some pages are just blank; and some pages are blank where text or graphics were intended to go. This is a particular problem in Appendix F, where critical soils and hydrologic analysis is missing."

Response

This comment has been received and noted. The Table of Contents has been updated to reflect the correct pagination. Subsections have been re-numbered and page numbers have been provided for each of the Appendices for ease of reference. Appendix F sub-Appendices 3, 8 and 9 of the project Hydrology Report were, in fact, missing as stated by the commenter. This is due to the fact that the Preliminary Hydrology Report, and not the Final Hydrology Report, was included in the IS/MND appendices. The Final Hydrology Report is included in this Response to Comments (see Attachment B) which includes sub-Appendices 3 (Soils Information), 8 (Source Control), and 9 (Operation and Maintenance).

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H2

The commenter states that, "Pagination is difficult. Pages 1-101 are fairly straightforward, but then follow the Appendices. Most Appendices are separately numbered, but some have Appendices within Appendices. Most confusing when trying to reference a specific section."

Response

This comment has been received and noted. As mentioned in Response to Comment H1 above, the Table of Contents has been updated to reflect the correct pagination. The subsections have been re-numbered and page numbers have been provided for each of the Appendices for ease of reference.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H3

The commenter states that, "If quality control on the final document is so blatantly lacking, what can be said of the factual information?"

Response

This comment has been received and noted and Quality Control of the document has been performed as requested.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been

identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H4

The commenter states that, "In terms of data itself, some is measured and some are model outputs. In both cases, there is now way to independently verify the accuracy and/or authenticity of these values. If models are used, there is no way to know if the input parameters truly reflect the on-site conditions. We need something more than implied 'because we say so' or 'we wouldn't lie to you' here."

Response

There are different approaches and assumptions that can be used in projecting the impacts of a development project on the environment, which include the use of computer modeling programs such as CalEEMod, AERMOD, RCNM, and SoundPLAN that utilize default inputs. CEQA requires that the project analysis consider only reasonable assumptions supported by substantial evidence in estimating the impacts of a project in order to avoid speculative analysis and conclusions that can be wrought from use of unsubstantiated claims or excessively "worst-case" scenarios. The environmental analysis is required to represent a project as accurately as is feasible for the sake of full disclosure of anticipated impacts. Because the proposed building is speculative in nature, actual tenants are not known; therefore, default output settings were used to analyze different uses including unrefrigerated warehouse and manufacturing. The IS/MND discloses the use of default model input parameters and their assumptions. Also, please see Response to Comment G4 above.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H5

The commenter states, "In several instances the report states that subsequent compliance plans will be developed and submitted to the Planning authorities (a Stormwater Runoff Management Plan; a Noise Mitigation Plan; a Storm Water Pollution Prevention Plan). These as yet unformulated compliance plans then in part for the basis for the determination of a Mitigated Negative Declaration. To avoid this classic case of putting the cart before the horse, these compliance plans should be part of this report."

Response

The compliance plans referenced by the commenter are not required to be provided prior to environmental (CEQA) clearance or entitlement approval. They are construction- and operation-related documents that will be completed and utilized during project development and in compliance with State and local laws and regulations. Issuance of grading, building, and operation permits is dependent on submission and approval of said plans. Also, please refer to Response to Comment G3 above.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H6

The commenter states that, "There are many errors and omissions (documented below) that cast doubt on the accuracy and the veracity of the report as a whole. This is especially true for the hydrologic analyses."

Response

This comment has been received and noted. Each of the errors mentioned by the commenter is addressed herein.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H7

The commenter states that, "On Page 31, Section 4.3.b, if this proposed project is to build a trucking warehouse, how is it that heavy-duty truck trips only account for 16.6% of the increased traffic?"

Response

The proposed project has been evaluated as a manufacturing use, which was determined to be the most intensive use from a traffic standpoint. Evaluation of a warehouse was also performed as it relates to traffic and air quality, both of which confirmed that the manufacturing use was the more intensive use. At this time, the proposed development is speculative in nature, meaning an end user has not been identified, and it is not considered a "trucking warehouse" as stated by the commenter. The proposed development will consist of a mix of passenger vehicle trips associated with employees and customers of the project, as well as a mix of light-, medium-, and heavy-duty truck trips. In terms of traffic generation by vehicle category, which includes passenger vehicles as well as trucks, the proposed project would actually generate less total daily trips than were analyzed in the project Traffic Impact Analysis. However, per Southern California Association of Government (SCAG) recommendations, the project was analyzed in terms of Passenger Car Equivalents (PCE), which includes only passenger vehicles, but leads to higher total daily trips. This scenario represents a worst-case scenario. As such, the proposed project as analyzed, took a more conservative approach to modeling traffic impacts to the Level of Service (LOS) of intersections in the project vicinity. Actual traffic impacts will, therefore, likely be less than estimated in the Traffic Impact Analysis. Trip generation rates and fleet mix were based on estimates provided in the Institute of Transportation Engineers Trip Generation Manual (9th Edition), which is widely employed by local and regional jurisdictions as an acceptable method for estimating trip generation and fleet mix. As such, the heavy-duty truck trip percentages used for the analysis in the IS/MND are consistent with the ITE Trip Generation Manual; therefore, the analysis represents a realistic assessment of proposed project conditions.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H8

The commenter states that, "On Page 32/33, Section 4.3.b, in Table 4 the outputs of NO_X is listed as Substantial because the modeled outputs levels are very near the threshold of 55 lb/day. However, in Table 5 the value of PM2.5 is very near the threshold of 8 lb/day, yet this value is not considered Substantial. Why is this?"

Response

The inclusion of "Yes" in the "Substantial?" row of Table 4 (Operational Daily Emissions (lbs/day)) of the IS/MND was a typo and has been changed to "No" to reflect the correct determination. The proposed project will not exceed any of the criteria pollutant emissions thresholds for daily operation including NO_X.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H9

The commenter states that, "On Page 39, Section 4.1.c, the project could have indirect impacts on sensitive communities downstream. However, with SWPPP (not defined) including Best Management Practices, these impacts would be reduced to less than significant impacts. Without documentation, how do we know this?"

Response

As defined on Page 42 of the IS/MND, a SWPPP is identified as a Storm Water Pollution Prevention Plan. As mentioned in Response to Comment H5 above, a SWPPP is a construction-related document and issuance of grading and building permits is dependent on submission and approval of this document. As such, the compliance plan referenced by the commenter is not required to be provided prior to environmental (CEQA) clearance or entitlement approval. Implementation of Best Management Practices (BMPs) found in the SWPPP and the project Water Quality Management Plan (WQMP), as required by State and local law, will reduce impacts to sensitive downstream communities to less than significant.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H10

The commenter states that, "On Page 39, Section 4.1.d, we are told that the project site is not located within an established or potential wildlife movement corridor. Without documentation, how do we know this?"

Response

As discussed in the project Biological Resources Assessment, land uses bordering the project site include commercial and industrial facilities to the north, west, and east (e.g., multiple towing companies), and recreational uses to the south (i.e., A.B. Brown Sports Complex Park). Therefore, the movement of wildlife species at the project site is substantially limited due to the habitat fragmentation caused by development and the project site does not serve as a continuous regional connection for wildlife species. In addition, Figure OS-7 of the 2025 General Plan shows that the project site is not within an identified MSHCP Core or Linkage. This discussion has been included in the Final IS/MND along with a citation for the source.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been

identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H11

The commenter states that, "On Page 40, Section 4.1.f, we are told that no suitable burrowing owl habitat exists on the project site. Without documentation, how do we know this?"

Response

As is shown on Page 43 of the Final IS/MND, Burrowing Owl surveys were conducted to assess the potential habitat and ensure that no Burrowing Owl or narrow endemic plant species have the potential to occur on the project site. The biological field survey was conducted on April 7, 2015, and revealed that no suitable Burrowing Owl habitat exists on the project site. As such, the determination that the project will not conflict with the MSHCP is correct and sufficient evidence has been provided.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H12

The commenter states that, "On Page 61, Section 4.6.a, operational BMPs will be identified in a Stormwater Runoff Management Plan that will be submitted to the City for review and approval. When will this take place? This compliance plan should be part of this report."

Response

As mentioned in Response to Comment H5 and H9 above, the Stormwater Runoff Management Plan is a construction-related document required by the State (and, therefore, by the City) prior to issuance of grading, building, and operation permits is dependent on submission and approval of said compliance plans. As such, the compliance plan referenced by the commenter is not required to be provided prior to environmental (CEQA) clearance or entitlement approval.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H13

The commenter states that, "On Page 61, Section 4.6.c, a holding basin will be constructed that will infiltrate water at a rate of 10 inches per hour. The infiltration rate of the natural soil was never tested (or at least the results appear nowhere in this report), so how do we know that his basin will perform as stated?"

Response

The infiltration rate of the natural soil was tested as part of the project Water Quality Management Plan, and is included in the WQMP report as Appendix 3 (Soils Information). The Final WQMP is included in the Final IS/MND and included at the end of this document as Attachment B. As shown, the proposed infiltration basin will exceed existing infiltration capacity and will therefore perform as intended.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H14

The commenter states that, "On Page 74, Section 4.9.a, mitigation measure N-1 calls for a noise mitigation plan verifying compliance effectiveness shall be prepared and submitted to the Planning Director. When will this take place? This compliance plan should be part of this report."

Response

As stated within Mitigation Measure N-1, a Construction Noise Mitigation Plan verifying the effectiveness of said measures is required to be prepared and submitted for review and approval by the Planning Director prior to issuance of demolition permits. Because the plan will rely on the demolition and construction contractor(s) based on their methods of demolition and construction, the plan is not required to be provided prior to environmental (CEQA) clearance or entitlement approval. Also, please refer to Response to Comment G3 above.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H15

The commenter states that, "On Page 76, Section 4.9.b, Table 17 has the term 'PPVref' as a column heading. Nowhere is this term defined. What is this term and why is it important?"

Response

According to the Caltrans *Transportation and Construction Vibration Guidance Manual*, the term "PPVref" refers to the Peak Particle Velocity of commonly used construction equipment such as pile drivers, vibratory rollers, bulldozers, and trucks. Extensive studies were performed by measuring data points at various distances for a wide variety of construction equipment. PPVref is displayed in the form of a decimal and is used in an equation to analyze the susceptibility of different types of buildings and structures to vibration impacts. The numbers displayed in Table 17 under the PPVref column indicate the Peak Particle Velocity of each piece of equipment that will be used on the proposed project. As shown in Table 17, the proposed project will have less than significant vibration impacts on nearby structures.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to

the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H16

The commenter states that, "On Page 78, Section 4.9.c, are the values in Table 19 correct? How were they obtained?"

Response

The City of Riverside Municipal Code sets an allowable exterior noise level for industrial uses at 70 dBA CNEL, 65 dBA CNEL for public recreational facilities and office/commercial use, 60 dBA for community support uses, and 55 dBA for residential use. Ambient noise at the project site would generally be defined by traffic on Center Street, Placentia Lane, and operational noise from neighboring industrial uses. Traffic noise from vehicular traffic generated by the proposed project was projected using SoundPLAN software based on estimated trip generation and distribution as identified in the traffic study provided by Kunzman Associates, Inc. Existing noise levels at the single family homes to the east and west, the industrial uses to the north and east, and the commercial use to the east were calculated and projected at the ground floor. The 2017 Opening Year Without and With Project traffic noise levels during the peak hour at neighboring uses were also projected using SoundPLAN. As shown in the IS/MND, Opening Year Without and With Project exterior noise levels will be within the allowable exterior noise levels of the established City of Riverside exterior noise standard for the industrial and commercial uses to the east and the residential use to the southeast of the project site on the east side of Orange Street. The values shown in Table 19 are in fact correct and reflect a "worst-case" project scenario.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H17

The commenter states, "On page 83/84, Section 4.13.a, what is LOS (level of service)? What are these values based on? What are the criteria?"

Response

As shown in Appendix A (Glossary of Transportation Terms) of the project Traffic Impact Analysis, "Level of Service (LOS)" refers to a qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs. LOS is used by local and regional public agencies to analyze jurisdictional roadways by categorizing traffic flow and assigning quality levels of traffic based on the above performance measures. Generally, LOS D or better is considered acceptable by most jurisdictions, which includes the City of Riverside.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H18

The commenter states that, "On Page 84, Section 4.13.a, in the paragraph under Trip Generation, what is the time period of the trips (hour, day, week, month, year)?"

Response

Trip generation rates were determined for daily trips, morning peak hour inbound and outbound trips, and evening peak hour inbound and outbound trips for the proposed land use. A discussion of the time period of trips has been added to the section of the IS/MND cited by the commenter.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H19

The commenter states that, "On Page 84, Section 4.13.a, in Table 20, what are the units of the Delay columns (second, minute, hour)? Also, where is Highgrove at Center Street? (It is not at Iowa)."

Response

Delay is presented in units of seconds. An asterisk and explanation of the units of delay has been included in the footer of Table 20. As shown in Figure 1 (Project Location Map) of the project Traffic Impact Analysis, the intersection of Highgrove Place at Center Street, which is denoted as Study Intersection #8, is located on the east side of I-215 between the Interstate and Iowa Avenue. At this location, Highgrove Place serves as the Center Street exit from northbound I-215 as well as a connector between Center Street and La Cadena Drive (which serves as a frontage road for the Interstate).

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H20

The commenter states that, "In Appendix F, Page 8, what is LID? This term is used repeatedly in this section but is never defined."

Response

The term "LID" refers to Low-Impact Development. Low-Impact Development refers to systems and practices that use or mimic natural processes that result in infiltration, evapotranspiration, or use of stormwater in order to protect water quality and associated aquatic habitat.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to

the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H21

The commenter states, "In Appendix F, Page 9, Table C.2 lists DMA 2-B with Stabilization Type of Natural Channel with Depressed Overflow Outlet. However, previously in Appendix F, Page 5, it is stated that there are no natural hydrologic features on the project site. How can these two statements be reconciled?"

Response

Appendix F, Section C, Table C.2 does not refer to existing natural drainage features. Table C.2 delineates Drainage Management Areas that will be included as part of the proposed project for the purpose of drainage. DMA 2-B refers to a proposed natural channel that will be constructed as one of many such drainage management features. Therefore, the statement that there are no natural hydrologic features on the project site is accurate.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H22

The commenter states that, "In Appendix F, Page 14, in Table D.3 DCV Calculations for LID BMPs, the term 'DCV' is never defined. What is this and why is it important?"

Response

The acronym "DCV" refers to "Design Capture Volume". The Design Capture Volume of an infiltration basin is equal to the amount of runoff a basin is designed to capture. This is important in determining whether a proposed BMP will capture enough runoff to ensure post-project flows are less than pre-project flows. In this case, the proposed basin will in fact provide sufficient DCV to ensure post-project flows are less than pre-project flows.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H23

The commenter states that, "Starting on Page 25, Section 4 (the Evaluation of Environmental Impacts) is broken down into subsections. However, the numbering of these subsections is inconsistent, labeled 4.1, 4.2, 4.3, 4.1, 4.2, 4.3, 4.4, …, 4.15. This makes it extremely difficult to uniquely refer to the many of the subsections."

Response

The subsections have been re-numbered for consistency and ease of reference.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H24

The commenter states that, "On Page 25, Section 4.1.a, the report states that the Riverside Municipal Code 19.130 requires a maximum building height of 45 feet. However, the proposed building height would be 47 feet."

Response

Riverside Municipal Code Chapter 19.130 requires that the maximum building height for all development in the Business Manufacturing Park (BMP) zone is 45 feet. However, Municipal Code Chapter 19.560.030 allows that uninhabited architectural features, such as parapet walls for screening of roof-mounted equipment, may be erected above the height limits prescribed in the Municipal Code. The proposed building will have a maximum height of 47 feet at the northern corners where screening will be provided for rooftop equipment. Thus, the project's height complies with the Riverside Municipal Code requirements.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H25

The commenter states that, "On Page 26, Section 4.1.d, the report attests to the 'general urban character of the area' and on Page 39, Section 4.1.c, the proposed project area is described as 'primarily urban'. However, most of the land is vacant and Page 42, Section 4.2.a, comments on the 'rural area of the project vicinity'. The area is either rural or urban. It can't be both."

Response

References to the "general urban character of the area" are referring to the City of Riverside generally, as well as the specific location of the project site. The reference to the "rural character of the project vicinity" is referring to the La Placita de Los Trujillos community that is located to the north of the project site, which has maintained its rural character unlike the project site and immediate surroundings.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H26

The commenter states that, "On Page 48, Section 4.3.b, the report states that the employment of Best Management Practices implemented through a Storm Water Pollution Prevention Plan would be required to limit the extent of eroded materials from a construction site. Furthermore, development of more than one acre would require compliance with the provisions of the NPDES regulations concerning the discharge of eroded materials and pollutants from construction sites and required the preparation and implementation of a SWPPP. However, no compliance plan SWPPP has been prepared as part of this report."

Response

As mentioned in Response to Comment H5, H9 and H12 above, issuance of grading, building, and operation permits is dependent on submission and approval of said compliance plans. Therefore, the compliance plan referenced by the commenter is not required to be provided prior to environmental (CEQA) clearance or entitlement approval.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H27

The commenter states that, "On Pages 61/62, Sections 4.6.c/d/e/f, all refer to a Section 3.9.b or 3.9.c where detailed hydrologic analysis was previously performed. However, Section 3.9 does not exist anywhere in this report, either in the main body or in any of the Appendices. Moreover, this detailed hydrologic analysis appears nowhere in the report."

Response

References to Section 3.9 found in the Hydrology and Water Quality Section have been changed to "4.9" to properly reflect the referenced section. Appendix F sub-Appendices 3, 8 and 9 of the project Hydrology Report were, in fact, missing as stated by the commenter. This is due to the fact that the Preliminary Hydrology Report, and not the Final Hydrology Report, was included in the IS/MND appendices. The Final Hydrology Report is included in this Response to Comments (see Attachment B) which includes sub-Appendices 3 (Soils Information), 8 (Source Control), and 9 (Operation and Maintenance).

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H28

The commenter states that, "On Page 62, Section 4.6.h, the report states that the project site is not in a 100-year flood hazard area or zone of the Santa Ana River. However, a map from the Army Corps of Engineers clearly shows the project site in the 100-year flood zone."

Response

According to FEMA Flood Insurance Rate Map #06065C0065G, the project site is not located within a 100-year flood hazard area or zone of the Santa Ana River. However, the site is located within "Zone X" of "Other Flood Areas"

which includes areas of 0.2% annual chance flood, areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, or areas protected by levees from 1% annual chance flood. As such, the project does not place housing or any other structures that could impede or redirect flows of the Santa Ana River. We were not able to locate a map from the Army Corps of Engineers for the project site as such maps are not available.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H29

The commenter states that, "On Page 62, Section 4.6.i, the report states that the project site is not in a dam inundation area. However, if the Seven Oaks dam on the Santa Ana River were breached, the project site would be affected."

Response

According to Chapter 04-11 (Flood and Dam Inundation Hazards) of the 2015 Riverside County General Plan, the project site is located approximately 15.65 miles downstream from the Seven Oaks Dam and is not located within the Dam's designated inundation zone. Moreover, according to Figure PS-4 (Flood Hazard Areas) of the City of Riverside 2025 General Plan Safety Element, the project site is not located within the dam inundation zone of any of the ten listed dams within the jurisdiction. Given that the project site is not delineated on any regulatory map or within an applicable regulatory plan, the determination that impacts related to dam inundation would be less than significant is correct.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H30

The commenter states that, "On Page 77, Section 4.9.b, Table 16 does NOT show that 'periodic heavy truck traffic occurring along Center Street will not exceed vibration criteria for structural damage to historic or sensitive buildings' as stated in the report. Rather it shows Distances to Vibration Receptors."

Response

The commenter is correct that Table 16 shows Distances to Vibration Receptors and not periodic heavy truck traffic. This citation has been corrected in the IS/MND to read "Table 18", which presents vibration thresholds for different building types. As discussed in Response to Comments L2 above, operation-related impacts will be less than significant. and periodic heavy truck traffic occurring along Center Street will not exceed vibration criteria for structural damage to historic and sensitive buildings.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the

Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H31

The commenter states that, "On Pages 91/92, Section 4.15.b, referring to the Mandatory Findings of Significance, under the Air Quality heading the report states that analysis in Section 4.3 found that impacts would be less than significant with mitigation incorporated to reduce operational NO_X emissions. Page 92 specifically refers to Mitigation Measure AQ-1. However, no such mitigation measure appears in Section 4.3 or any other section of the report."

Response

As stated in Response to Comment G2 above, the original AQ-1 has been removed. While no mitigation for air quality is required at this time to reduce project impacts to less than significant levels, Mitigation Measure AQ-1 has been incorporated should future use of the development include a refrigerated component. In the case of the proposed development changing to a refrigerated warehouse use sometime in the future, Mitigation Measure AQ-1 requires the applicant to conduct a new Air Quality and Climate Change Assessment.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H32

The commenter states that, "In Appendix C, Figure 6, a Soils Map of the vicinity, the main soil type of the project area (SfA) is not listed in the map legend with a thumbnail description of the soil characteristics."

Response

The table below lists the map legend soil types requested by the commenter:

Map Unit Symbol	Map Unit Name
SfA	San Emigdio fine sandy loam, deep, 0 to 2 percent slopes
GtA	Grangeville fine sandy loam, drained, 0 to 2 percent slopes

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H33

The commenter states that, "In Appendix F, Page 12, Table D.1 states that the project site is not located within 100 feet of a water supply well. However, just across Placentia Lane from the project site is Garner 'B' Well and Garner 'D' Well."

Response

The commenter is correct in stating that the Garner 'B' and Garner 'D' wells are located across the street from the project site on the south side of Placentia Lane. These wells are located in the parking lot of the AB Brown Sports Complex and will not be physically impacted by construction or operation of the proposed project. Moreover, the proposed project will not impact groundwater sources that supply the Garner B and Garner D wells, which are located at least 130 feet from the project's southern boundary. Therefore, while there are wells in close proximity to the project site, the proposed project will not have an impact on these wells or their water quality.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H34

The commenter states that, "In Appendix F, Page 14, Table D.3 DCV Calculations, the parameters for DMA Runoff Factors and Design Storm are taken from a WQMP Guidance Document which is not provided. We cannot evaluate the calculations if the parameters are not documented."

Response

The 2010 Municipal Separate Storm Sewer system (MS4) Permit adopted by the Santa Ana Regional Water Quality Control Board (SARWQCB) (Order No. R8-2015-0004), and issued to San Bernardino County for the upper and middle Santa Ana River watershed, requires all new development and significant redevelopment projects covered by the Order to incorporate Low Impact Development (LID) Best Management Practices (BMPs) to the maximum extent practicable. In addition, the Order also requires development of a standard design and post-development BMP guidance for site design/LID BMPs, source control, treatment control BMPs (where applicable to project) and HCOC mitigation measures to the maximum extent practicable. As the project site is located in the Santa Ana River watershed, Order No. R8-2010-0036 applies to the proposed project, even though it is located in Riverside County. The purpose of the WQMP Guidance document is to provide direction to project proponents on the regulatory requirements applicable to a private or public development activity from project conception to completion. According to the *Technical Guidance Document for Water Quality Management Plans*, the SARWQCB utilizes the Natural Resources Conservation Service (NRCS) method to assign runoff factors to specific areas. The NRCS method uses a combination of soil conditions and land uses (ground cover) to indicate the runoff potential of an area. Soil properties influence the relationship between runoff and rainfall since different soils have differing rates of infiltration. Based on infiltration rates, the NRCS has divided soils into four hydrologic soil groups. Group A Soils have a low runoff potential due to high infiltration rates and consist primarily of deep, well-drained sands and gravels. Group B Soils have a moderately low runoff potential due to moderate infiltration rates and consist primarily of moderately deep to deep, moderately well to well drained soils with moderately fine to moderately coarse textures. Group C Soils have a moderately high runoff potential due to slow infiltration rates and consist primarily of soils in which a layer exists near the surface that impedes the downward movement of water or soils with moderately fine to fine texture. Group D Soils have a high runoff potential due to very slow infiltration and consist primarily of clays with high swelling potential, soils with permanently high water tables, soils with a claypan or clay layer at or near the surface, and shallow soils over nearly impervious parent material. The parameters for DMA Runoff Factors can be accessed at the following link:

https://rcflood.org/downloads/NPDES/Documents/SA_WQMP/SantaAnaWQMPGuidance.pdf.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the

Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H35

The commenter states that, "In Appendix F, in the Water Quality Management Plan Exhibit, the Best Management Practices map legend lists the infiltration basin (1) as a proposed infiltration trench (5)."

Response

The commenter appears to mix up the DMA Legend and BMP Legend. The proposed Infiltration Basin is included in the project as a DMA, while the Infiltration Trenches are included in both the BMPs and DMAs. Infiltration basins and trenches are correctly labeled on both the legends and the site plan within the WQMP Exhibit. This comment does not identify any error or omission.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H36

The commenter states that, "In Appendix F, Page 23, Appendix 2, the Grading and Drainage Plans are unreadable."

Response

The Grading and Drainage Plans provided in the WQMP are in PDF format, which can be zoomed in and out. The grading and drainage plans are available to the public at the City of Riverside Planning and Public Works Departments. Grading and drainage plans are required to be reviewed and approved by the City Engineer. Permits for construction will not be issued if the grading and drainage plans do not meet the requirements of the City Engineer, which includes legibility.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H37

The commenter states that, "In Appendix F, Page 24, Appendix 3, Soils Information-Geotechnical Study and Other Infiltration Testing Data, the page is blank. Critical infiltration data (and presumably other soils data) are missing."

Response

As previously mentioned in Response to Comment G2 above, Appendix F sub-Appendix 3 of the project Hydrology Report was, in fact, missing as stated by the commenter. This is due to the fact that the Preliminary Hydrology Report, and not the Final Hydrology Report, was included in the IS/MND appendices. The Final Hydrology Report is included in this Response to Comments (see Attachment B) which includes sub-Appendix 3 (Soils Information).

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H38

The commenter states that, "In Appendix F, Pages 29-31, Appendix 8-10, the pages are blank. The Pollution Sources/Source Control Checklist is missing. The Operational and Maintenance Plan and Documentation of Finance, Maintenance and Recording Mechanisms is missing. The Best Management Practices Fact Sheets, Maintenance Guidelines and Other End-User BMP Information is missing."

Response

As mentioned above, the Final Hydrology Report is included in this Response to Comments (see Attachment B) which includes sub-Appendices 3 (Soils Information), 8 (Source Control), and 9 (Operation and Maintenance). Appendix F, sub-Appendix 10, is not blank as the commenter states. Appendix 10 includes educational materials as part of the project WQMP.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment H39

The commenter states that, "In conclusion, I feel that: the quality control of the report production is blatantly lacking; the report contains numerous errors in facts; the report is missing critical analyses; the report lacks auxiliary compliance plans; and the report presents unverified data, some based on unverified model inputs. In light of these serious deficiencies, I believe that the report does not support a determination of a Mitigated Negative Declaration."

Response

Quality control of the report has been conducted and errors and typos have been corrected. No additional analysis was necessary. Compliance plans are required to be submitted and approved by the City prior to issuance of construction permits. Data within the report has been correctly cited. Regarding the use of modeling programs, because the proposed building is speculative in nature and actual tenants are not known, default output settings were used for computer modeling programs such as CalEEMod, AERMOD, RCNM, and SoundPLAN to analyze different uses including unrefrigerated warehouse and manufacturing. The IS/MND discloses the use of default model input parameters and their assumptions.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Letter I: Richard Drury, Lozeau-Drury LLP

RECEIVED
OCT 3 2016
Community & Economic Development Department

September 30, 2016

Via E-Mail and Overnight Mail

Brian Norton, Senior Planner
City of Riverside
Community Development Department
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Re: Center Street Commerce Building Initial Study and Draft Mitigated Negative Declaration

Dear Mr. Norton:

I am writing on behalf of Laborers International Union of North America, Local Union No. 1184 and its members living in Riverside County and the City of Riverside (collectively "LIUNA" or "Commenters") regarding the Draft Mitigated Negative Declaration and Initial Study (collectively, "MND") prepared for the Center Street Commerce Building ("Project").

After reviewing the MND together with environmental consulting firm, Soil Water Air Protection Enterprise (SWAPE) (attached hereto as Exhibit A), it is evident that the document contains numerous errors and omissions that preclude accurate analysis of the Project. As a result of these inadequacies, the MND falls as an informational document.

Commenters ask the City of Riverside ("City") to prepare an environmental impact report ("EIR") for the Project because there is a fair argument that the Project may have significant unmitigated impacts, including impacts on air quality, traffic, and biological resources. An EIR is required to analyze these and other impacts and to propose mitigation measures to reduce the impacts to the extent feasible.

PROJECT DESCRIPTION

The project includes construction of a 308,000-square foot building on 15.88 gross acres (15.63 net acres) located south side of Center Street and north of Placentia Lane (APNs 246-070-017, 246-040-002, -026, and -027). The building could be used for any number of commercial or light industrial uses as permitted in the BMP zone; however, end users have not been identified at this time, as such, specific details about the future operation of the facility are not currently available. The proposed design will be a concrete tilt-up building. The project includes 110,591 square feet of landscaping, the potential for up to 282 parking stalls, and 47 loading docks. The project applications include Design Review and Lot Consolidation, from 4 lots to 1 lot.

The project site is primarily vacant with a vacant single family residence and five ancillary structures located on the southeastern portion of the site. The project will have access to Center Street via two 40-foot wide driveways located along the frontage. No access to Placentia Lane to the south will be provided. Interior drive aisles along the western, eastern, and southern sides of the building will have a minimum width of 40 feet to provide adequate vehicle and emergency access as required by the Fire Department. The interior drive aisle along the northern side of the building will be 24 feet wide and provide access for passenger vehicles. Center Street and Placentia Lane are not fully improved streets. The proposed project will include the construction of new curbs and gutters, public sidewalk, and landscaping.

LEGAL STANDARD

As the California Supreme Court held, "[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR." *Communities for a Better Env't v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 319-320 ["*CBE v. SCAQMD*"], citing, *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75, 88; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 504–505. "Significant environmental effect" is defined very broadly as "a substantial or potentially substantial adverse change in the environment." Pub. Res. Code ["PRC"] § 21068; see also 14 CCR § 15382. An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial." *No Oil, Inc., supra,* 13 Cal.3d at 83. "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." *Communities*

for a Better Env't v. Cal. Resources Agency (2002) 103 Cal.App.4th 98, 109 ["*CBE v. CRA*"].

The EIR is the very heart of CEQA. *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1214; *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927. The EIR is an "environmental 'alarm bell' whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return." *Bakersfield Citizens*, 124 Cal.App.4th at 1220. The EIR also functions as a "document of accountability," intended to "demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action." *Laurel Heights Improvements Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 392. The EIR process "protects not only the environment but also informed self-government." *Pocket Protectors*, 124 Cal.App.4th at 927.

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment." PRC § 21080(d); see also *Pocket Protectors*, 124 Cal.App.4th at 927. In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact thus requiring no EIR (14 Cal. Code Regs.§ 15371), only if there is not even a "fair argument" that the project will have a significant environmental effect. PRC, §§ 21100, 21064. Since "[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process," by allowing the agency "to dispense with the duty [to prepare an EIR]," negative declarations are allowed only in cases where "the proposed project will not affect the environment at all." *Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440.

Under the "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to support the agency's decision. 14 CCR § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-15; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602. The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. *Pocket Protectors*, 124 Cal.App.4th at 928.

The "fair argument" standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

> This 'fair argument' standard is very different from the standard normally followed by public agencies in making administrative determinations. Ordinarily, public

> agencies weigh the evidence in the record before them and reach a decision based on a preponderance of the evidence. [Citations]. The fair argument standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact. The lead agency's decision is thus largely legal rather than factual; it does not resolve conflicts in the evidence but determines only whether substantial evidence exists in the record to support the prescribed fair argument.

Kostka & Zischke, *Practice Under CEQA*, §6.29, pp. 273-274. The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with a preference for resolving doubts in favor of environmental review." *Pocket Protectors*, 124 Cal.App.4th at 928 [emphasis in original].

As a matter of law, "substantial evidence includes . . . expert opinion." PRC § 21080(e)(1); 14 CCR § 15064(f)(5). CEQA Guidelines demand that where experts have presented conflicting evidence on the extent of the environmental effects of a project, the agency must consider the environmental effects to be significant and prepare an EIR. 14 CCR § 15064(f)(5); PRC § 21080(e)(1); *Pocket Protectors*, 124 Cal.App.4th at 935.

DISCUSSION

A. There is a Fair Argument that the Project May have Significant Environmental Impacts Requiring an EIR.

1. There is a Fair Argument that the Project May Have Significant Air Quality Impacts.

I1

The Initial Study (IS) admits that the future use of the Project is unknown. Therefore, the IS states that is selects manufacturing as a "worst-case, conservative approach to assess operational impacts." However, the consulting firm, Soil Water Air Protection Enterprise ("SWAPE") concludes that warehouse uses would have significantly greater impacts than manufacturing. Such uses are clearly reasonably foreseeable since there are a large number of similar-sized warehouses being located in the Riverside County area, including World Logistics Center in Moreno Valley, Moreno Valley Logistics Center, any many others. According to Appendix A of the IS/MND:

"There is no tenant for the proposed building, thus, the operational components of the project are speculative at this time. The City of Riverside recommended consideration of a 'manufacturing' use as a worst-case, conservative approach to assessing operational impacts. The building has been treated as such herein, consistent with the project traffic impact analysis and health risk assessment" (Appendix A, p. 27, pp. 143).

SWAPE states:

Assuming that the proposed industrial building will be used for manufacturing purposes, however, would not provide a worst-case, conservative scenario, as is suggested by the IS/MND. Rather, assuming that the proposed building will be used for high-cube warehousing would provide for the worst-case, conservative scenario, as it accounts for the possibility of cold-storage requirements, a higher volume of heavy-duty truck trips, and longer truck trip lengths. By failing to account for the possibility of warehouse land uses, the Project's potential operational impacts are greatly underestimated. A DEIR should be prepared to adequately assess the potential impacts that operation of the Project may have on regional and local air quality.

(SWAPE p. 1-2).

SWAPE states:

As discussed by the South Coast Air Quality Management District (SCAQMD), "CEQA requires the use of 'conservative analysis' to afford 'fullest possible protection of the environment.'"[1] As a result, the most conservative analysis should be conducted. With this in mind, the proposed Project should be modeled as *refrigerated warehouse without rail spurs*, or at the very least, a portion of the building should be modeled as a *refrigerated warehouse without rail spurs*, and the remaining portion of the building should be modeled as an *unrefrigerated warehouse without rail spurs*, so as to take into consideration the possibility that future tenants may require both cold storage and non-cold storage.

Refrigerated warehouses release more air pollutants and greenhouse gas (GHG) emissions when compared to unrefrigerated warehouses or other industrial buildings, such as manufacturing land uses. First, warehouses equipped with

[1] "Warehouse Truck Trip Study Data Results and Usage" Presentation. SCAQMD Inland Empire Logistics Council, June 2014, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/final-ielc_6-19-2014.pdf?sfvrsn=2

cold storage (refrigerators and freezers, for example) are known to consume more energy when compared to warehouses or other industrial buildings without cold storage.[2] Second, warehouses equipped with cold storage typically require refrigerated trucks, which are known to idle for much longer, even up to an hour, when compared to unrefrigerated hauling trucks, such as those used for manufacturing purposes.[3] Lastly, according to a July 2014 *Warehouse Truck Trip Study Data Results and Usage* presentation prepared by the SCAQMD, it was found that hauling trucks that require refrigeration result in greater truck trip rates when compared to non-refrigerated hauling trucks, such as those used for manufacturing purposes.[4]

By not including refrigerated warehouses as a potential land use in the air quality model, the Project's operational emissions may be grossly underestimated, as the future tenants are currently unknown. Unless the Project Applicant can demonstrate that the future tenants of these proposed buildings will be limited to unrefrigerated industrial uses, exclusively, it should be assumed that a mix of cold and non-cold storage will be provided on-site. A DEIR should be prepared to account for the possibility of refrigerated warehouse needs by future tenants.

(SWAPE pp. 2-3).

SWAPE concludes that the IS further underestimates Project emissions by assuming an improper truck mix (too many small trucks and too few large trucks), and also by underestimating the length of truck trips. (SWAPE pp. 4-8).

Given the large number of warehouse projects being constructed in the region (see cumulative impact section below), there is a "fair argument" that this Project may be used as a warehouse. A new CEQA analysis should be conducted calculating emissions from the Project if used for warehouse purposes, and using a proper truck fleet profile and trip lengths.

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[2] Managing Energy Costs in Warehouses, Business Energy Advisor, *available at:* http://bizenergyadvisor.com/warehouses

[3] "Estimation of Fuel Use by Idling Commercial Trucks," p. 8, *available at:* http://www.transportation.anl.gov/pdfs/TA/373.pdf

[4] "Warehouse Truck Trip Study Data Results and Usage" Presentation. SCAQMD Mobile Source Committee, July 2014, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/finalized-presentation072214.pdf?sfvrsn=2, p. 7, 9

2. There Is a Fair Argument that the Project will have Significant Cancer Risk Impacts.

I2

Appendix B to the Initial Study is a Health Risk Assessment (HRA). The SCAQMD has established a CEQA significance threshold that any project creating a cancer risk of greater than 10 per million has significant impacts requiring an EIR. (App. B., p. 23). The Project will generate significant diesel emissions from trucks and other vehicular traffic. Diesel engine exhaust matter is identified by the State as a cancer-causing chemical. http://oehha.ca.gov/media/downloads/proposition-65//p65single080516.pdf.

Appendix B calculates that the Project will create a cancer risk of 31.8 per million (3.18 x 10-5). (App. B. p. 26). This exceeds the 10 per million CEQA significance threshold by over 300%. Nevertheless, the Initial Study concludes that there is no significant cancer risk impact. The exceedance of the CEQA significance threshold creates a fair argument that the Project will have significant environmental impacts requiring analysis in an EIR. Indeed, in many instances, such air quality thresholds are the only criteria reviewed and treated as dispositive in evaluating the significance of a project's air quality impacts. See, e.g. *Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 960 (County applies BAAQMD's "published CEQA quantitative criteria" and "threshold level of cumulative significance"). See also *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 110-111 ("A 'threshold of significance' for a given environmental effect is simply that level at which the lead agency finds the effects of the project to be significant"). The California Supreme Court recently made clear the substantial importance that a SCAQMD significance threshold plays in providing substantial evidence of a significant adverse impact. *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 327 ("As the [South Coast Air Quality Management] District's established significance threshold for NOx is 55 pounds per day, these estimates [of NOx emissions of 201 to 456 pounds per day] constitute substantial evidence supporting a fair argument for a significant adverse impact"). Therefore, an EIR is required to analyze the Project's cancer impacts and to propose all feasible mitigation measures to reduce those impacts.

SWAPE states:

> According to the IS/MND, because "no thresholds for cancer or non-cancer risk will be exceeded by the project," the Project will have a less than significant health risk impact (Appendix B, p. 29). This conclusion, however, is incorrect, as it completely contradicts the health risk calculations conducted for the proposed

Project. As a result, the Project's health risk impact and level of significance are entirely misrepresented. An updated health risk assessment should be prepared in a DEIR that more accurately represents the proposed Project's health risk impacts.

Appendix B of the IS/MND discloses the assumptions, methods, and values used to estimate the Project's health risk impacts. According to Appendix B,

> "Concentrations were modeled using AERMOD and then input into the Hot Spots and Reporting Program (HARP) Health Risk Assessment Standalone Tool (RAST) computer software to calculate cancer risk based on the methods and recommendations found in the HRA Guidelines. The results of the HARP evaluation of cancer risk for residential 9-years, 30 years, and 70 years, and worker 25-years exposure scenarios for grid receptors and discrete receptors are summarized in the following tables and detailed program results are included as Appendix D" (p. 25).

The results of the 70-year residential lifetime health risk assessment, which are summarized in Table 7 of Appendix B, indicate that four residential sensitive receptor locations would have a health risk impact that exceeds the 10 in one million significance threshold (see excerpt below) (Appendix B, p. 26).

Table 7 (70 Years (Lifetime) Population-Wide Cancer Burden)

Index	Receptor	Receptor	Concentration	Cancer Risk
76	467291	3764194	0.03558	3.18E-06
86	467391	3764194	0.02631	2.35E-06
85	467391	3764294	0.02097	1.87E-06
66	467191	3764194	0.01852	1.66E-06

Even though the IS/MND estimates that the Project will create a cancer risk of 31.8 in one million (3.18 x 10-5), which exceeds the 10 in one million significance threshold by over 300%, the IS/MND still concludes that the Project would have a less than significant health risk impact (Appendix B, p. 26). This conclusion, however, is entirely incorrect, as Table 7 clearly demonstrates that the Project would have a significant health risk impact. By failing to adequately apply the results of the health risk assessment to the established significance threshold, the Project's health risk impact is misrepresented. The results of the IS/MND's health risk assessment clearly demonstrate that the Project would have a potentially significant health risk impact, and as such, this significance

determination should have been made, and additional mitigation measures should have been identified and implemented.

(SWAPE pp. 8-9).

3. The Initial Study Fails to Impose All Feasible Mitigation Measures to Reduce Project Impacts.

I3

One of the fundamental purposes of CEQA is to ensure that all feasible mitigation measures are imposed to reduce Project impacts. CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and mitigation measures. (CEQA Guidelines § 15002(a)(2) and (3); See also, *Berkeley Jets*, 91 Cal. App. 4th 1344, 1354; *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564) The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced." (Guidelines §15002(a)(2)) If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns." (Pub.Res.Code § 21081; 14 Cal.Code Regs. § 15092(b)(2)(A) & (B))

In general, mitigation measures must be designed to minimize, reduce or avoid an identified environmental impact or to rectify or compensate for that impact. (CEQA Guidelines § 15370.) Where several mitigation measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified. (*Id.* at § 15126.4(a)(1)(B).) A lead agency may not make the required CEQA findings unless the administrative record clearly shows that all uncertainties regarding the mitigation of significant environmental impacts have been resolved.

CEQA requires the lead agency to adopt feasible mitigation measures that will substantially lessen or avoid the Project's potentially significant environmental impacts (Pub. Res. Code §§ 21002, 21081(a)), and describe those mitigation measures in the CEQA document. (Pub. Res. Code § 21100(b)(3); CEQA Guidelines § 15126.4.) A public agency may not rely on mitigation measures of uncertain efficacy or feasibility. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 727 (finding groundwater purchase agreement inadequate mitigation measure because no record evidence existed that replacement water was available).) "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking

into account economic, environmental, legal, social and technological factors. (CEQA Guidelines § 15364.) Mitigation measures must be fully enforceable through permit conditions, agreements or other legally binding instruments. (*Id.* at § 15126.4(a)(2).)

A lead agency may not conclude that an impact is significant and unavoidable without requiring the implementation of all feasible mitigation measures to reduce the impacts of a project to less than significant levels. (CEQA Guidelines §§ 15126.4, 15091.)

SWAPE points out that there are dozens of mitigation measures that have been imposed on similar projects in the region that would significantly reduce air pollution, greenhouse gas and cancer impacts. (SWAPE pp. 9-11). An EIR is required to analyze all of these feasible mitigation measures.

4. The Project Will Have Significant Biological Impacts, But Relies on Improper Deferred Mitigation.

I4

The Initial Study admits that several species of bats may exist at the site, but defers development of mitigation measures until after Project approval in violation of CEQA. The Initial Study states:

> Several species of bats are known to occur in the vicinity of the project site. Several sheds, mobile homes, and trees are located on the project site that could provide suitable roosting habitat for bat species. Thus, Mitigation Measure BIO-3, requiring a pre-construction survey of suitable habitat for roosting bats within 14 days prior vegetation or structure removal be conducted, has been incorporated. Should an occupied maternity or colony roost be detected during the preconstruction survey, ***CDFW shall be contacted about how to proceed.*** With incorporation of Mitigation Measure BIO-3, impacts to roosting bats will be reduced to less-than-significant levels.
>
> Initial Study, p. 38 (emphasis added).

While the Initial Study admits that the Project may impact bats, the proposed mitigation, "CDFW shall be contacted about how to proceed," is not a mitigation measure at all. First, the use of the passive voice makes unclear who will contact CDFW. Second, CEQA prohibits a lead agency from deferring development of mitigation until after the approval of the project. This is precisely what the IS does in this case. The IS must specify what mitigation measures will be implemented, not simply state that mitigation measures will be developed at a later time by a different agency if necessary. "A study conducted after approval of a project will inevitably have a

diminished influence on decisionmaking. Even if the study is subject to administrative approval, it is analogous to the sort of post hoc rationalization of agency actions that has been repeatedly condemned in decisions construing CEQA." (*Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 307.) "[R]eliance on tentative plans for future mitigation after completion of the CEQA process significantly undermines CEQA's goals of full disclosure and informed decisionmaking; and[,] consequently, these mitigation plans have been overturned on judicial review as constituting improper deferral of environmental assessment." (*Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 92.)

B. THE MND'S CUMULATIVE IMPACT ANALYSIS VIOLATES CEQA.

For each environmental impact, the IS concludes that the Project would not result in cumulatively significant impacts. See, e.g., IS 92. Each conclusion is based on improper reasoning, and an analysis that is not in compliance with CEQA. I5

An initial study and MND must discuss a Project's significant cumulative impacts. 14 CCR § 15130(a). This requirement flows from CEQA section 21083, which requires a finding that a project may have a significant effect on the environment if "the possible effects of a project are individually limited but cumulatively considerable. . . . 'Cumulatively considerable' means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

"Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." 14 CCR § 15355(a). "[I]ndividual effects may be changes resulting from a single project or a number of separate projects." *Id.* "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." *Comm. for a Better Env't v. Cal. Resources Agency ("CBE v. CRA")* (2002) 103 Cal.App.4th 98, 117; 14 CCR § 15355(b). A legally adequate cumulative impacts analysis views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the project at hand.

The MND's conclusory cumulative impact analyses are devoid of substantial evidence and errs as a matter of law and commonsense. Lacking any substantial evidence, the MND fails to provide sufficient information for the public to evaluate cumulative impacts that may result from approval of the Project.

The CEQA Guidelines allow two methods for satisfying the cumulative impacts analysis requirement: the list-of-projects approach, and the summary-of projects approach. Under either method, the MND must summarize the expected environmental effects of the project and related projects, provide a reasonable analysis of the cumulative impacts, and examine reasonable mitigation options. 14 CCR § 15130(b). The MND's cumulative impacts analysis does not comply with either of these requirements.

Indeed, the MND does not mention a single past, present, or future project that it evaluated cumulatively with the instant Project. This is despite the fact that the City of Riverside and the neighboring City of Moreno Valley are currently undertaking environmental review for numerous similar distribution center, warehouse and logistics center projects – all of which will generate similar truck traffic and air pollution impacts, which will be cumulatively significant. These include the massive 40 million square foot World Logistics Center in Moreno Valley (State Clearinghouse No. 2012021045), the 1.7 million square foot Moreno Valley Logistics Center (SCH Number: 2015061040), the 2.2 million square foot ProLogis Eucalypus Industrial Park in Moreno Valley, (SCH NO. 2008021002), and many others. Without any information on what – if any – cumulative projects were considered, and what environmental impacts those cumulative projects have, the public and decision makers lack any information on which to assess the validity of the cumulative impacts conclusions under CEQA.

The entire cumulative impact analysis for the Project consists of nothing more than the following paragraph (same for each impact):

> Air Quality. The context for assessing cumulative air quality impacts to the area is the extent to which project related emissions will contribute to a net increase of any criteria pollutant for which the project region is in non-attainment. The analysis provided in Section 4.3 related to air quality found that impacts would be less than significant with mitigation incorporated to reduce operational NOx emissions. Mitigation Measure AQ-1 requires that prior to issuance of business licenses, the building tenant shall provide evidence to the City Planning Division that emissions from truck fleet trips and other operations will not exceed the South Coast Air Quality Management District's (SCAQMD) daily oxides of nitrogen threshold. Therefore, while the project will contribute to localized or regional cumulative impacts, the project contribution will not be considerable.

IS 92.

This bare conclusion does not constitute an analysis. Without even the most basic information about any of the cumulative projects or their environmental impacts, the MND's general cumulative impact conclusion is not supported by substantial evidence.

Comment I1

This comment states that, "There is a fair argument that the project may have significant air quality impacts. This Initial Study (IS) admits that the future use of the project is unknown. Therefore, the IS states that is [sic] selects manufacturing as a worst-case, conservative approach to assess operational impacts. However, the consulting firm, Soil Water Air Protection Enterprise (SWAPE) concludes that warehouse uses would have significantly greater impacts than manufacturing. Such uses are clearly reasonably foreseeable since there are a large number of similar-sized warehouses being located in the Riverside County area… SWAPE states: Assuming that the proposed industrial building will be used for manufacturing purposes, however, would not provide a worst-case, conservative scenario, as is suggested by the IS/MND. Rather, assuming that the proposed building will be used for high-cube warehousing would provide for the worst-case, conservative scenario, as it accounts for the possibility of cold-storage requirements, a higher volume of heavy-duty truck trips, and longer truck trip lengths. By failing to account for the possibility of warehouse land uses, the project's potential operational impacts are greatly underestimated. A DEIR should be prepared to adequately assess the potential impacts that operation of the project may have on regional and local air quality."

Response

The project includes a speculative industrial building that could be occupied by one or more various tenants ranging from office to manufacturing to warehouse uses. In order to evaluate the variety of potential uses, the project was evaluated with an 80/20 percent (truck/car) fleet mix in the traffic study and the air quality study. The manufacturing use was assessed because that use represented the "worst case" scenario. However, an assessment of impacts based on the unrefrigerated warehouse use was also conducted using CalEEMod (see Attachment A). Slight differences in emissions occurred as a result of employing these different land uses in the model- most notably that the manufacturing use has a greater impact than the unrefrigerated warehouse use. However, it was determined that both uses would still generate emissions levels below established thresholds. The differences in emissions between the two uses are identified in the tables provided in this response. This fleet mix is supported by substantial evidence and is widely used to characterize trucks trips from warehouse uses. Because the actual tenants are not known; to analyze the project in the context of a refrigerated warehouse default setting would be speculative. CEQA does not require analysis of unknown speculative conditions. If in the future the project were to include a refrigerated component, a new Air Quality and Climate Change Assessment would be required to analyze such a proposal and the project's environmental review document would need to be reopened to consider those changes. The characteristics of the fleet mix for this project is represented in the air quality study in terms of mix of vehicles and variation in trip length in order to fully characterize the project. Addressing these variations solely through fleet mix would result in unaccounted for trips at varying distances that could distort the emissions estimates for the project. The environmental analysis is required to represent a project as accurately as is feasible for the sake of full disclosure of any anticipated impacts. The IS/MND makes all efforts to disclose the use of default model input parameters and their assumptions. Impacts remain less than significant and no further analysis is required at this time.

Daily Operational Emissions (lbs/day): Unrefrigerated Warehouse Use

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
Area Sources	16	<1	<1	0	<1	<1
Energy Demand	<1	<1	<1	<1	<1	<1
Mobile Sources	3	31	38	<1	8	2
Summer Total	*19*	*31*	*39*	<1	*8*	*2*
Winter						
Area Sources	16	<1	<1	0	<1	<1
Energy Demand	<1	<1	<1	<1	<1	<1
Mobile Sources	3	32	41	<1	8	2
Winter Total	*19*	*32*	*41*	<1	*8*	*2*
Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Substantial?	**No**	**No**	**No**	**No**	**No**	**No**
Source: MIG, 2015.						

Daily Operational Emissions (lbs/day): Manufacturing Use

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
Area Sources	16	<1	<1	0	<1	<1
Energy Demand	<1	<1	<1	<1	<1	<1
Mobile Sources	4	31	55	<1	12	3
Summer Total	*21*	*34*	*58*	<1	*12*	*4*
Winter						
Area Sources	16	<1	<1	0	<1	<1
Energy Demand	<1	<1	<1	<1	<1	<1
Mobile Sources	4	33	58	<1	12	3
Winter Total	*21*	*35*	*61*	<1	*12*	*4*
Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Substantial?	**No**	**No**	**No**	**No**	**No**	**No**
Source: MIG, 2016.						

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment I2

This comment states that, "There is a fair argument that the project will have significant cancer risk impacts. Appendix B to the Initial Study is a Health Risk Assessment (HRA). The SCAQMD has established a CEQA significance threshold that any project creating a cancer risk of greater than 10 per million has significant impacts requiring an EIR (App. B, p.23)… Appendix B calculates that the project will create a cancer risk of 31.8 per million (3.18 x 10-5) (App. B, p.26). This exceeds the 10 per million CEQA significance threshold by over 300%. Nevertheless, the Initial Study concludes that there is no significant cancer risk impact. The exceedance of the CEQA significance threshold creates a fair argument that the project will have significant environmental impacts requiring analysis in an EIR.

Response

The IS/MND includes the determination that the proposed project will not result in a significant increase in cancer cases. This determination is factual and supported by both CEQA statute and case law. Primarily, it is important to note that the receptor location (Index 76, Easting 467291, Northing 3764194) identified by the commenter as having a cancer risk of 31.8 per million is in fact referring to a single point located on the proposed project site, and does not denote an overall impact to the environment as a whole. CEQA statute requires evaluation of a project's physical changes to the environment and the resulting effects that are determined to be significant by the Lead Agency. The project Health Risk Assessment notes that residential receptor locations that exceed the 10 cases per million population cancer risk threshold are located on the project site itself and will be demolished as a result of the proposed project. Further, the referenced table shows the cancer risk screening which is modeled for 24 hours a day, 7 days a week, over the course of a 70 year period. Future visitors to the site and/or employees are not required to be evaluated in the HRA because (1) they will not be on the site 24 hours a day, 7 days a week, (2) they will not be there for a full 70 years, and (3) they would not be classified as residential receptors. As shown in the project Health Risk Assessment, none of the nearby sensitive receptors that will remain in place after project completion would experience health risks in excess of the ten in one million threshold. Determining if land is suitable for certain uses and the collection and interaction of those uses is a land use issue to be examined through the General Plan or other programmatic endeavor. The impacts of the environment on those land uses, similarly, are addressed in the environmental review for those planning endeavors. The use is permitted by the General plan and zoning ordinance. As such, analyzing potential toxic emissions impacts to future users of the proposed warehouse would constitute what is termed "speculative analysis", which is not the intent

of CEQA statute. Since the SCAQMD threshold of 10 per million does not apply to points located on the proposed project site, the proposed project will not exceed the SCAQMD significance threshold cited by the commenter.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment I3

This comment states that, "The Initial Study fails to impose all feasible mitigation measures to reduce project impacts. One of the purposes of CEQA is to ensure that all feasible mitigation measures are imposed to reduce project impacts. CEQA requires public agencies to avoid or reduce environmental damage when 'feasible' by requiring 'environmentally superior' alternatives and mitigation measures. 'Feasible' means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. A lead agency may not conclude that an impact is significant and unavoidable without requiring the implementation of all feasible mitigation measures to reduce the impacts of a project to less than significant levels. However, SWAPE points out that there are dozens of mitigation measures that have been imposed on similar projects in the region that would significantly reduce air pollution, greenhouse gas and cancer impacts. An EIR is required to analyze all of these feasible mitigation measures."

Response

The results of the project air quality analysis found that the project would not exceed significance thresholds without mitigation. The commenter states that "…A lead agency may not conclude that an impact is significant and unavoidable without requiring the implementation of all feasible mitigation measures to reduce the impacts of a project to less than significant levels…." As the project impacts are not "significant and unavoidable," no such finding is required. And, no mitigation measures are required for the project, as proposed. If in the future the Project were to include a refrigerated component, an updated Air Quality and Climate Change Assessment would be required to show project-related criteria pollutant emissions will remain below established SCAQMD thresholds. If the updated Air Quality and Climate Change Assessment were to show the project would exceed established SCAQMD thresholds for criteria pollutant emissions, mitigation measures would be required to ensure impacts are reduced to less than significant levels. As such, no additional mitigation needs to be considered for this project because the project impacts as proposed are not determined to be significant and unavoidable.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment I4

This comment states that, "The Initial Study admits that several species of bats may exist at the site, but defers development of mitigation measures until after Project approval in violation of CEQA. While the Initial Study admits that the project may impact bats, the proposed mitigation, 'CDFW shall be contacted about how to proceed', is not a mitigation measure at all. First, the use of the passive voice makes unclear who will contact CDFW. Second, CEQA prohibits a lead agency from deferring development of mitigation until after the approval of the project. This is precisely what the IS does in this case. The IS must specify what mitigation measures will be implemented, not simply state that mitigation measures will be developed at a later time by a different agency if necessary."

Response

All existing on-site buildings and structures will remain undisturbed until the project construction plans are approved and the buildings demolished. As such, even if bats are currently present, it is possible for them to move in or move out prior to actual demolition of the buildings. It is for this reason that a pre-construction survey is appropriate. Moreover, the mitigation is not deferred because a performance standard has been established, in that the mitigation measure is required to be implemented prior to issuance of grading permit. The City has complete authority to withhold the permit until proof of full compliance with the Mitigation Measure, which will ensures that no impacts will occur to bat species because of the project. The mitigation is based upon objective, specific criteria, which must be satisfied if bats are observed during or prior to construction. These specific standards include, but are not limited to, the creation of a buffer exclusion zone, which would address noise, screening, and necessary vegetation. Prior to the start of construction, a survey for roosting bats shall be performed by a qualified biologist within seven days of the start of the construction start date for all proposed work areas adjacent to appropriate roosting habitats. The survey shall include all appropriate roosting habitats within 250 feet of any work area. If an active roost is found, or survey data provides evidence of an active roost within 100 feet of a work area, or if a maternity roost is found, or survey data provides evidence of a maternity roost, within 250 feet of a work area, the limits of the work area will be clearly marked and a qualified biological monitor shall be provided and shall remain on-site during construction activities within the vicinity of the roost or maternity roost. The biologist will ensure that construction activities do not encroach upon the 100-foot buffer around an active roost or 250-foot buffer around a maternity colony site. The proposed mitigation, therefore, does not constitute deferral because measurable performance standards are identified and required to be achieved prior to issuance of appropriate permits. Use of performance standards are allowed pursuant to CEQA.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment I5

This comment states that, "The MND's cumulative impact analysis violates CEQA. For each environmental impact, the IS concludes that the project would not result in cumulatively significant impacts. "…Each conclusion is based on improper reasoning, and an analysis that is not in compliance with CEQA.

"… A legally adequate cumulative impacts analysis views a particular project over time and in conjunction with other related past, present, and reasonably foreseeable probable future projects whose impacts might compound or interrelate with those of the project at hand.

"The MND's conclusory cumulative impact analyses are devoid of substantial evidence and errs as a matter of law and commonsense. Lacking any substantial evidence, the MND fails to provide sufficient information for the public to evaluate cumulative impacts that may result from approval of the project.

"The CEQA guidelines allow two methods for satisfying the cumulative impacts analysis requirement: the list-of-projects approach and the summary-of-projects approach. Under either method, the MND must summarize the expected environmental effects of the project and related projects, provide a reasonable analysis of the cumulative impacts, and examine reasonable mitigation options. The MND's cumulative impacts analysis does not comply with either of these requirements. Indeed, the MND does not mention a single past, present, or future project that it evaluated cumulatively with the instant project. In addition to being conclusory, the cumulative 'analysis' is also based on flawed logic. The conclusion that the project will have no cumulative impact because each individual impact has been reduced to a less than significant level relies on the exact argument CEQA's cumulative impact analysis is meant to protect against. A new cumulative impact analysis is needed for the project that complies with CEQA's requirement to look at the project's environmental impact, combined with the impacts of other past, current, and probable future projects. An EIR must be prepared to fully analyze the project's cumulative impacts."

Response

The commenter is incorrect when he states "The CEQA guidelines allow two methods for satisfying the cumulative impacts analysis requirement: the list-of-projects approach and the summary-of-projects approach." In fact, the two accepted methods for analysis of cumulative impacts are the list-of-projects approach and the "projection" approach. The cumulative impact analysis included in the MND is in fact based on the projection method, which indicates a project will not result in a cumulatively considerable impact if it is consistent with local, regional, and other planning programs developed to address environmental issues. The Initial Study and MND do indeed include analysis of all potential cumulative impacts at the local, regional, and global levels, as appropriate to the cumulative context of the issue under evaluation and show that the proposed project will be consistent with local, regional, and other planning programs. The Project was assessed using this method and found to be consistent with all applicable programs and thus would not contribute considerably to any cumulative impacts. This comment provides no evidence to the contrary.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Letter J: Anna Hoover, Pechanga Band of Luiseno Mission Indians

PECHANGA CULTURAL RESOURCES
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September 30, 2016

VIA E-MAIL and USPS

Mr. Brian Norton
Senior Planner
City of Riverside
Community Development Department
Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522

Re: Pechanga Tribe Comments on the Center Street Commerce Building Initial Study and Draft Mitigated Negative Declaration

Dear Mr. Norton:

This comment letter is written on behalf of the Pechanga Band of Luiseño Indians (hereinafter "the Tribe"), a federally recognized Indian tribe and sovereign government. The Tribe formally requests, pursuant to Public Resources Code §21092.2, to be notified and involved in the entire CEQA environmental review process for the duration of the above referenced project (the "Project"). If you have not done so already, please add the Tribe to your distribution list(s) for public notices and circulation of all documents, including environmental review documents, archeological reports, and all documents pertaining to this Project. The Tribe further requests to be directly notified of all public hearings and scheduled approvals concerning this Project. Please also incorporate these comments into the record of approval for this Project.

The Tribe submits these comments concerning the Project's potential impacts to cultural resources in conjunction with the environmental review of the Project. Pechanga is very concerned that AB 52 consultation was not completed prior to release of the Initial Study/Mitigated Negative Declaration (IS/MND), nor were we provided with a copy of the mitigation measures for review. AB 52 clearly discusses that mitigation measures must be included and agreed upon by both the City and the Tribe. The measures included in the IS/MND are not sufficient and include deferred mitigation, which is not allowable under CEQA. With the inclusion of these measures, the IS/MND fails and does not meet the CEQA mandates. Additional details are outlined below.

THE CITY OF RIVERSIDE MUST INCLUDE INVOLVEMENT OF AND CONSULTATION WITH THE PECHANGA TRIBE IN ITS ENVIRONMENTAL REVIEW PROCESS

J1

It has been the intent of the Federal Government[1] and the State of California[2] that Indian tribes be consulted with regard to issues which impact cultural and spiritual resources, as well as other governmental concerns. The responsibility to consult with Indian tribes stems from the unique government-to-government relationship between the United States and Indian tribes. This arises when tribal interests are affected by the actions of governmental agencies and departments. In this case, it is undisputed that the project lies within the Pechanga Tribe's traditional territory. Therefore, in order to comply with CEQA and other applicable Federal and California law, it is imperative that the City of Riverside consult with the Tribe in order to guarantee an adequate knowledge base for an appropriate evaluation of the Project effects, as well as generating adequate mitigation measures.

LEAD AGENCY CONSULTATION WITH THE PECHANGA TRIBE REQUIRED

On September 25, 2014, the Governor signed AB 52, legislation that amends the California Environmental Quality Act. *See* Public Resources Code §§ 5097.94, 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies to projects that have a notice of preparation for an environmental impact report, negative declaration or mitigated negative declaration filed on or after July 1, 2015. The law now requires tribal consultation by cities, counties, and other CEQA lead agencies and an evaluation of a new environmental category, "tribal cultural resources," which acknowledge and take into account the resources' tribal values rather than focusing purely on the scientific or academic value of the resources.

AB 52 establishes a government-to-government process between a tribe and a lead agency, including a specific consultation process with California Native American tribes concerning potential impacts to tribal cultural resources. AB 52 also recognizes that tribes may have expertise regarding their culture and history and requires the consideration of the tribal values inherent in cultural resources to provide a complete understanding of their nature and the significance of the potential impacts. The law further added new substantive considerations concerning significant impacts, when a CEQA document may be certified or adopted, what findings/elements are to be included in a CEQA document concerning tribal cultural resources, and appropriate mitigation for impacts to tribal cultural resources.

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[1] See e.g., Executive Memorandum of April 29, 1994 on Government-to-Government Relations with Native American Tribal Governments, Executive Order of November 6, 2000 on Consultation and Coordination with Indian Tribal Governments, Executive Memorandum of September 23, 2004 on Government-to-Government Relationships with Tribal Governments, and Executive Memorandum of November 5, 2009 on Tribal Consultation.
[2] See California Public Resource Code §5097.9 et seq.; California Government Code §§65351, 65352.3 and 65352.4

Pechanga began AB 52 consultation with the City of Riverside September 1, 2016, which was incorrectly identified in the IS/MND. Although the IS/MND states that consultation was concluded at that time, Pechanga was not provided with the proposed mitigation measures, we were not provided with the archaeological report or any of the Project documents we requested and AB 52 was not formally closed. Thus, the Tribe believes this is a failure in the AB 52 process and in the formal consultation process by the City.

PECHANGA CULTURAL AFFILIATION TO PROJECT AREA

The Pechanga Tribe asserts that the Project area is part of Luiseño, and therefore the Tribe's, aboriginal territory as evidenced by the existence of Luiseño place names, *tóola yixélval* (rock art, pictographs, petroglyphs), and an extensive Luiseño artifact record in the vicinity of the Project. This culturally sensitive area is affiliated with the Pechanga Band of Luiseño Indians because of the Tribe's longstanding prehistoric and historic cultural ties to this area.

The Pechanga Tribe's knowledge of our ancestral boundaries is based on reliable information passed down to us from our elders; published academic works in the areas of anthropology, history and ethno-history; and through recorded ethnographic and linguistic accounts. Of the many anthropologists and historians who have presented boundaries of the Luiseño traditional territory, few have excluded the Riverside area from their descriptions (Sparkman 1908; Kroeber 1925; White 1963, Smith and Freers 1994), and such territory descriptions correspond almost identically with that communicated to the Pechanga people by our elders. While historic accounts and anthropological and linguistic theories are important in determining traditional Luiseño territory, the most critical sources of information used to define our traditional territories are our songs, creation accounts, and oral traditions.

Luiseño history originates with the creation of all things at *'Ewa Teméku*, in the present day City of Temecula, and dispersing out to all corners of creation (what is today known as Luiseño territory), which includes the City of Riverside and the Santa Ana River. It was at Temecula that the Luiseño deity *Wuyóot* lived and taught the people, and here that he became sick, finally expiring at Lake Elsinore. Many of our songs relate the tale of the people taking the dying *Wuyóot* to the many hot springs, including those at Elsinore, where he ultimately died (DuBois 1908). He was cremated at *'Ewa Teméku*. It is the Luiseño creation account that connects Elsinore to Temecula and the rest of Luiseño territory. Origin accounts state that from Elsinore, the people spread out, establishing villages and marking their territories.

Many traditions and stories are passed from generation to generation by songs. One of the Luiseño songs recounts the travels of the people to Elsinore after a great flood (DuBois 1908). From here, they again spread out to the north, south, east and west. Three songs, called *Kaamalam/Monívol*, are songs of the places and landmarks that were destinations of the Luiseño ancestors, several of which are located near the Project area. They describe the exact route of the Temecula (Pechanga) people and the landmarks made by each to claim title to places in their migrations (DuBois 1908:110). The Native American Heritage Commission (NAHC) Most

Likely Descendent (MLD) files substantiate this habitation and migration record from oral tradition. These examples illustrate a direct correlation between the oral tradition and the physical place; proving the importance of songs and stories as a valid source of information outside of the published anthropological data.

Tóota yixélval (rock art) is also an important element in the determination of Luiseño territorial boundaries. *Tóota yixélval* can consist of petroglyphs (incised) elements, or pictographs (painted) elements. The science of archaeology tells us that places can be described through these elements. Riverside and Northern San Diego Counties are home to red-pigmented pictograph panels. Archaeologists have adopted the name for these pictograph-versions, as defined by Ken Hedges of the Museum of Man, as the San Luis Rey style. The San Luis Rey style incorporates elements which include chevrons, zig-zags, dot patterns, sunbursts, handprints, net/chain, anthropomorphic (human-like) and zoomorphic (animal-like) designs. Tribal historians and photographs inform us that some design elements are reminiscent of Luiseño ground paintings. A few of these design elements, particularly the flower motifs, the net/chain and zig-zags, were sometimes depicted in Luiseño basket designs and can be observed in remaining baskets and textiles today.

An additional type of *tóota yixélval*, identified by archaeologists also as rock art or petroglyphs, are cupules. Throughout Luiseño territory, there are certain types of large boulders, taking the shape of mushrooms or waves, which contain numerous small pecked and ground indentations, or cupules. Many of these cupule boulders have been identified within a few miles of the Project. Additionally, according to historian Constance DuBois:

> When the people scattered from Ekvo Temeko, Temecula, they were very powerful. When they got to a place, they would sing a song to make water come there, and would call that place theirs; or they would scoop out a hollow in a rock with their hands to have that for their mark as a claim upon the land. The different parties of people had their own marks. For instance, Albañas's ancestors had theirs, and Lucario's people had theirs, and their own songs of Munival to tell how they traveled from Temecula, of the spots where they stopped and about the different places they claimed (1908:158).

Thus, our songs and stories, our indigenous place names, as well as academic works, demonstrate that the Luiseño people who occupied what we know today as the City of Riverside and its sphere of influence ancestors of the present-day Luiseño/Pechanga people, and as such, Pechanga is culturally affiliated to this geographic area.

The Tribe welcomes the opportunity to meet with the City to further explain and provide documentation concerning our specific cultural affiliation to lands within your jurisdiction.

PROJECT IMPACTS TO CULTURAL RESOURCES

The proposed Project is located in a highly sensitive region of Luiseño territory and the Tribe believes that the possibility for recovering subsurface resources during ground-disturbing activities is high, which is also supported in the IS/MND Section 4.2-Cultural Resources. The Tribe has over thirty-five (35) years of experience in working with various types of construction projects throughout its territory. The combination of this knowledge and experience, along with the knowledge of the culturally-sensitive areas and oral tradition, is what the Tribe relies on to make fairly accurate predictions regarding the likelihood of subsurface resources in a particular location.

Given the sensitivity of the area, inadvertent discoveries are foreseeable impacts and thus need to be appropriately mitigated for within the confines of the Project. The identification of surface resources during an archaeological survey should not be the sole determining factor in deciding whether mitigation measures for inadvertent discoveries are required. The cultural significance of the area should play a large part in determining whether specifications concerning unanticipated discoveries should be included.

PROJECT MITIGATION MEASURES

The proposed Project is on land that is within the traditional territory of the Pechanga Band of Luiseño Indians. Pechanga is not opposed to this Project; however, we are opposed to any direct, indirect and cumulative impacts this Project may have to tribal cultural resources. The Tribe's primary concerns stem from the Project's proposed impacts on Native American cultural resources. Concerns about both the protection of unique and irreplaceable cultural resources, such as Luiseño village sites, sacred sites and archaeological items which would be displaced by ground disturbing work on the Project, and on the proper and lawful treatment of cultural items, Native American human remains and sacred items likely to be discovered in the course of the work must be properly accounted for and mitigated per AB 52 and CEQA.. J2

The Tribe believes that the proposed mitigation measures a listed in Section 4.2 are not sufficient, given the sensitivity of the area. The 2003 archaeological sensitivity analysis clearly stated that the area along the Santa Ana River (*Wanáwna*) should be considered sensitive for archaeological and cultural resources. Additionally, with the presence of tribal cultural resources within a close proximity to the Project, the potential to impact additional, subsurface resources is high.

Although the mitigation measures address procedures for inadvertent finds, they are not the standard City of Riverside measures, nor do they appropriate include Tribal involvement in the development process. As stated above, the Tribe was not provided with these measures for review prior to public release of the document and were unable to suggest edits/corrections.

Further, CUL-1 is deferred mitigation and under CEQA, is not allowable. All potential development options and off-site impacts should be properly analyzed at this time so that the decision-makers have all available data to review. By requiring additional archaeological surveys at a later date, the results cannot be properly analyzed nor can avoidance or proper preservation methods be applied, which are mandated under CEQA. Pechanga recommends that additional surveys be completed and included in the final IS/MND or a recirculated IS/MND as appropriate.

In addition to completing all archaeological work prior to scheduling for public hearing, Pechanga requests, in order to ensure that the IS/MND is compliant with AB 52 and CEQA, the following revisions to the mitigation measures to be included in the document (underlines are additions, strikeouts are deletions):

Mitigation Measures:

~~In the event of the unanticipated discovery of archaeological resources during earthmoving operations~~ The following mitigation measures are recommended to reduce potentially significant impacts to archaeological resources ~~that are accidentally discovered~~ during implementation of the proposed project to a less than significant level:

CUL-1 ——— THIS IS DEFERRED MITIGATION AND IS NOT ALLOWABLE UNDER CEQA. ~~Prior to the grading permit issuance, the City should require the Applicant to complete a supplemental Phase I Technical Report for cultural resources if project elements are realigned beyond the limits of the cultural resources report completed in 2015. Phase I work efforts would also be necessary if the final site plan impacts any areas that were not examined during the current cultural resource survey and study. The applicant should retain a qualified archaeologist to submit to the City a Supplemental Phase I Cultural Resources Technical Report discussing any supplemental Phase I evaluation, potential impacts, avoidance, and minimization measures that were not addressed in the original Phase I Technical Report. The supplemental Phase I Technical Report shall be submitted to Native American organizations and other appropriate or concerned agencies/stakeholders for their review and comment.~~

CUL-12 ——— ~~Conduct Archaeological Sensitivity Training for Construction Personnel. The Applicant shall retain a qualified professional archaeologist who meets U.S. Secretary of the Interior's Professional Qualifications and Standards, to conduct an Archaeological Sensitivity Training for construction personnel prior to commencement of excavation activities. The training session shall be carried out by a cultural resources professional with expertise in archaeology, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. The training session will include a handout and will focus on how to identify archaeological resources that may be encountered during earthmoving activities~~

and the procedures to be followed in such an event, the duties of archaeological monitors, and the general steps a qualified professional archaeologist would follow in conducting a salvage investigation if one is necessary.

CUL-3 Monitor Construction Excavations for Archaeological Resources is required at all depths and strata's. The Applicant shall retain a qualified archaeological monitor, who will work under the direction and guidance of a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. The archaeological monitor shall be present during all construction excavations (e.g., grading, trenching, or clearing/grubbing) into non-fill younger Pleistocene alluvial sediments. Multiple earth-moving construction activities may require multiple archaeological monitors. The archaeological monitoring will keep a daily archaeological monitoring log of all earthmoving activities occurring during the grading phase of the project's construction. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (native versus artificial fill soils), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered. Full time monitoring can be reduced to part time inspections if determined adequate by the project archaeologist.

CUL-4 Cease Ground-Disturbing Activities and Implement Treatment Plan if Archaeological Resources Are Encountered. In the event that archaeological resources are unearthed during ground-disturbing activities, ground disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. A buffer area of at least 50 feet shall be established around the find where construction activities shall not be allowed to continue until a qualified archaeologist has examined the newly discovered artifact(s) and has evaluated the area of the find. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by project construction activities shall be evaluated by a qualified professional archaeologist, who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards. Should the newly discovered artifacts be determined to be prehistoric, Native American Tribe/Individuals should be contacted and consulted and Native American construction monitoring should be initiated. The Applicant and City shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. The plan may include implementation of archaeological data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis. Collected cultural resources (artifacts) and associated records shall be transferred, including title, to the appropriate curation facility which meets the standards set forth in 36 CRF Part 79 for federal repositories. All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible.

CUL-1 Prior to any earth moving activity, the Project Applicant shall retain a qualified principal investigator (PI), defined as an archaeologist who meets the Secretary of the Interior's Standards for professional archaeology, to oversee the cultural resources-related mitigation efforts. A qualified archaeological monitor shall monitor all ground disturbing activities for the duration of the Project. The archaeological monitor will work under the supervision of the principal investigator. The duration and timing of the monitoring shall be determined by the principal investigator in consultation with the City of Riverside and a Tribal Monitor from the Pechanga Band of Luiseño Indians. If, in consultation with the City of Riverside and the Tribal Monitor, the principal investigator determines that full-time monitoring is no longer warranted, he or she may recommend a reduction in the level of monitoring to periodic spot checking or may recommend that monitoring cease entirely.

The Project archaeologist will have the authority to stop and redirect grading in the immediate area of a find in order to evaluate the find and determine the appropriate next steps, in consultation with the Tribal Monitor. Any newly discovered cultural resource deposits shall be subject to a cultural resources evaluation which will be detailed in a Cultural Resources Monitoring Plan (CRMP) to be completed by the archaeologist, the City and the Pechanga Tribe, prior to the start of grading. The CRMP will document the proposed methodology for inadvertent finds, the state law process should human remains be identified, the grading activity observation process, the mitigation measures and conditions of approval for the Project, as well as the customs and traditions of the Pechanga Tribe.

CUL-2 At least 30 days prior to beginning project construction, the Project Applicant shall contact the Pechanga Tribe to notify the Tribe of grading, excavation and the monitoring program, and to develop a Cultural Resources Treatment and Monitoring Agreement which will be developed between the Project Applicant the Pechanga. The Agreement shall address the treatment of known cultural resources, the designation, responsibilities, and participation of professional Native American Tribal monitors during grading, excavation and ground disturbing activities; project grading and development scheduling; terms of compensation for the monitors; and treatment and final disposition of any cultural resources, sacred sites, and human remains discovered on the site.

The Pechanga Tribal Monitor will have the authority to stop and redirect grading in the immediate area of a find in order to evaluate the find and determine the appropriate next steps, in consultation with the Project archaeologist. Such evaluation shall include culturally appropriate temporary and permanent treatment pursuant to the Agreement which may include avoidance of cultural resources, in-

place preservation and/or re-burial on the Project property in an area that will not be subject to future disturbances for preservation in perpetuity.

CUL-3 The archaeological PI, along with a representative designated by the Pechanga Tribe shall attend the pre-grading meeting with the construction manager and any contractors and will conduct a Cultural Resources Worker Sensitivity Training to those in attendance. The Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event inadvertent discoveries of cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated, and any other appropriate protocols. All new construction personnel that begin work on the Project following the initial Training must take the Cultural Sensitivity Training prior to beginning work.

CUL-4 All cultural materials that are collected during the grading monitoring program and from any previous archaeological studies or excavations on the project site, with the exception of sacred items, burial goods and human remains which will be addressed in the Treatment Agreement required in CUL-2, shall be curated according to current professional repository standards. The collections and associated records shall be transferred, including title, to the Pechanga Tribe's curation facility which meets the standards set forth in 36 CRF Part 79 for federal repositories. All sacred sites, should they be encountered within the project area, shall be avoided and preserved as the preferred mitigation, if feasible.

CUL-5 If inadvertent discoveries of subsurface archaeological/cultural resources are discovered during grading, the Applicant, the archaeological PI, and Pechanga shall assess the significance of such resources and shall meet and confer regarding the mitigation for such resources. Pursuant to Calif. Pub. Res. Code § 21083.2(b) avoidance is the preferred method of preservation for archaeological resources. If the Developer, the project archaeologist and the Tribe cannot agree on the significance or the mitigation for such resources, these issues will be presented to the Planning Director for decision. The Planning Director shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the Tribe. Notwithstanding any other rights available under the law, the decision of the Planning Director shall be appealable to the Planning Commission and/or City Council.

CUL-~~5~~6 Prepare Report Upon Completion of Monitoring Services. The archaeological ~~monitor~~PI, ~~under the direction of a qualified professional archaeologist~~ who meets the U.S. Secretary of the Interior's Professional Qualifications and Standards,

shall prepare a final report at the conclusion of archaeological monitoring which shall to include results of the monitoring program, artifact catalogs and site record forms if applicable, updated site record forms for the existing resources within the Project boundaries, the daily archaeological monitoring logs, and any other important information or events that occurred during earthmoving. The report shall be submitted within 60 days of completion of grading activities but prior to obtaining Certificates of Occupancy, to the City, Applicant, the Eastern Information Center (EIC), and the Pechanga Tribe. ~~representatives of other appropriate or concerned agencies~~ to signify the satisfactory completion of the project and required mitigation measures. ~~The report shall include a description of resources unearthed, if any, evaluation of the resources with respect to the California Register and CEQA, and treatment of the resources to include curation.~~

CUL-67 Not applicable. No comment.

~~Mitigation Measure~~
~~For components of the proposed project that require excavation activities, the following mitigation measure is recommended to reduce potentially significant impacts to human remains to a less than significant level:~~

CUL-~~7~~8: Cease Ground-Disturbing Activities and Notify County Coroner If Human Remains Are Encountered. If human remains are unearthed during implementation of the Proposed Project, the City of Riverside and the Applicant shall comply with State Health and Safety Code Section 7050.5. The City of Riverside and the Applicant shall immediately notify the County Coroner and no further disturbance shall occur until the County Coroner has made the necessary findings as to origin ~~and disposition~~ pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). After the MLD has inspected the remains and the site, they have 48 hours to provide recommendations to the landowner ~~the treatment and/or disposal, with appropriate dignity, the human remains and any associated funerary objects. Upon the reburial of the human remains, the MLD shall file a record of the reburial with the NAHC and the project archaeologist shall file a record of the reburial with the CHRIS EIC.~~ If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Subdivision (k) of Section 5097.94, if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance

The Tribe reserves the right to fully participate in the environmental review process, as well as to provide further comment on the Project's impacts to cultural resources and potential mitigation for such impacts.

The Pechanga Tribe looks forward to working together with the City of Riverside in protecting the invaluable Pechanga cultural resources found in the Project area. Please contact me at 951-770-8104 or at ahoover@pechanga-nsn.gov once you have had a chance to review these comments so that we might address any outstanding issues concerning the mitigation language. Thank you.

Sincerely,

Anna Hoover
Deputy THPO/Cultural Analyst

Cc Pechanga Office of the General Counsel
Gaby Adame, Planning/Historic Preservation

Comment J1

This comment reiterates that under current Federal and State law it is imperative that the City of Riverside consult with the Tribe in order to guarantee an adequate knowledge base for an appropriate evaluation of the project effects, as well as generating adequate mitigation measures.

Response

Pechanga began AB 52 consultation with the City of Riverside on September 1, 2016. However, consultation with the tribe was not completed, as was incorrectly stated in the IS/MND. Since receipt of this letter, the project proponent has engaged in consultation with the Pechanga Band of Mission Indians and involved the Tribe in the creation of mitigation measures intended to reduce impacts to cultural resources to less than significant levels. These mitigation measures have been revised in a manner such that they will still ensure adequate treatment of uncovered Native American cultural resources while not requiring recirculation of the MND. These revisions were approved by the tribe; therefore, no further response to this comment is required at this time.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment J2

This comment states that, "The Tribe believes that the proposed mitigation measures listed in section 4.2 are not sufficient, given the sensitivity of that area. The Tribe was not provided with these measures for review prior to public release of the document and the Tribe was unable to suggest edits/corrections…. Further CUL-1 is deferred mitigation and under CEQA is not allowable."

Response

Since receipt of this letter, the project proponent has engaged in consultation with the Pechanga Band of Mission Indians and involved the Tribe in the creation of mitigation measures intended to reduce impacts to cultural resources to lees than significant levels. These changes to the mitigation measures have been included in the revised IS/MND by the project proponent. Because the original Mitigation Measures were sufficient to reduce potential impacts to less than significant levels, recirculation of the IS/MND is not necessary with inclusion of the updated mitigation language. As such, no further response to this comment is required at this time.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Letter K: Erin Snyder

From: To: Cc: Date: Subject: FW: [External] Re: City of Riverside - Center Street Commerce Center P14-1033_P14-103 4
From:epolcene@juno.com [mailto:epolcene@juno.com] Sent: Friday, September 30, 2016 4:59 PM To: Norton, BrianBNorton@riversideca.gov Subject: [External] Re: City of Riverside - Center Street Commerce Center P14-1033_P14-103 4

Brian Norton and Riverside Zoning Administrator, I am writing to express my concern for planning cases #P14-1033 and 1034, and the submitted intent to file a Mitigated Negative Declaration. I am very concerned about the inaccuracies and deficiencies in this document and the proposed project overall.

I know you have received comments from other concerned citizens and I would like to express my agreement with the comments submitted by the Northside Improvement Association, Sala Ponnach and Karen Renfro. The discrepancies in the MND document are clearly of enough magnitude to invalidate the report and require a full Environmental Impact Review/Report (EIR). The California Environmental Quality Act and EIR are legally required processes enacted to protect our people, lands and communities. I am never in support of trying to circumvent these protections.

Reported figures in the document are inconsistent with each other (numbers of parking/loading spaces), or inaccurate due to the fact that no end use of this facility has been determined so how can they accurately state how many vehicles; whether cars, trucks or forklifts will be accommodated? Reports of the current status of the neighborhood are inaccurate with descriptions of urban, well-lit and no historical value being used that are not true. Additionally out-dated information was used to come to some presented conclusions. K1

The value of the soil, groundwater resources, wildlife connections from the La Loma Hills and Springbrook Wash to the Santa Ana River is minimized and the proposed mitigations are in many cases inadequate or at this time non-existent. The air quality concerns alone are huge and yet realistically without an idea of what will end up in this facility we really can't know anything from the presented info. K2

Additionally, the document contains typos, missing pieces and confusing dogma. Very hard to understand and interpret. Finally, this project is not compliant with the City General Plan 2025 or the Northside Community Plan of 1991. The community has long been against industrial development in this area even when redevelopment overpowered the objections. Zoning changes from that time do not agree with the general plan and need to be changed. Redevelopment is gone, the zoning and concept of it in the northside needs to go too. Please to not accept this submitted Mitigated Negative Declaration. K3

This project would be in conflict with the Riverside 2.0 and Carbon Action Plan initiatives. Currently the land which has never been developed, covered with concrete, etc.) is sequestering a tremendous amount of carbon each year. I truly great service to our community and environment. If this project goes through not only with that ongoing benefit be lost but the amount of carbon released through the disturbance of the soil and through the vehicles associated with the facility will substantially increase our carbon footprint. Additionally, I understand there has already been unpermitted grading at the site. To me this indicates the intention of the project to disregard the rules and decreases my confidence in their truly mitigating their impacts. K4

Erin Snyder 1645 Mathews St. Riverside, 92501

"Teachers open the door, you enter by yourself."

- Old Chinese Proverb

Please note: message attached

Comment K1

The commenter states that, "Reported figures in the document are inconsistent with each other (numbers of parking/loading spaces), or inaccurate due to the fact that no end use of this facility has been determined so how can they accurately state how many vehicles; whether cars, trucks or forklifts will be accommodated? Reports of the current status of the neighborhood are inaccurate with descriptions of urban, well-lit and no historical value being used that are not true. Additionally out-dated information was used to come to some presented conclusions."

Response

The number of stalls proposed to be provided by the project has been changed from "368", which is the required number of stalls, to "404" which is the actual number of stalls being proposed. This number properly reflects the number of stalls shown being provided on the project site plan, which shows the provision of 167 passenger vehicle stalls and 237 truck trailers stalls. CEQA does not require a project to analyze impacts outside the scope of the proposed project. Even though an end user has not yet been identified, the number of stalls provided by the proposed project exceeds the number of stalls required by the City Zoning code. The use of cars, trucks, and forklifts is analyzed in the project Health Risk Assessment. The vast majority of the project's anticipated environmental impacts are based upon the square footage and projected land uses of the project. The environmental analysis is required to represent a project as accurately as is feasible for the sake of full disclosure of anticipated impacts. However, the IS/MND analyzes both warehouse and manufacturing uses and shows that impacts related to both uses will be less than significant. Because the proposed building is speculative in nature, actual tenants are not known; therefore, default output settings for computer modeling programs such as CalEEMod, AERMOD, RCNM, and SoundPLAN were used to analyze different uses including unrefrigerated warehouse and manufacturing. The IS/MND makes all efforts to disclose the use of default model input parameters and their assumptions. Because the square footage and proposed land use of the project have not changed, the analysis provided in the IS/MND is accurate and sufficient.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment K2

The commenter states that, "The value of the soil, groundwater resources, wildlife connections from the La Loma Hills and Springbrook Wash to the Santa Ana River is minimized and the proposed mitigations are in many cases inadequate or at this time non-existent. The air quality concerns alone are huge and yet realistically without an idea of what will end up in this facility we really can't know anything from the presented info."

Response

The Initial Study accurately states that the proposed project site is not currently used as a wildlife connection or wildlife corridor. Mitigation Measures BIO-1 through BIO-3 have been incorporated to ensure that impacts to the movement of animals will be less than significant. These measures include pre-construction surveys for the presence of bird nests and roosting bats as well as restrictions on construction activities that can occur if the pre-construction surveys result in the discovery of active nests or roosts. All feasible mitigation was considered when evaluating potentially significant impacts. The project Air Quality and Climate Change Assessment found that project-related emissions would be less than established SCAQMD thresholds and impacts would be less than significant. It should also be noted that the zoning for the site allows for warehouse uses, which is consistent with the proposed project. The environmental analysis is required to represent a project as accurately as is feasible for the sake of full disclosure of anticipated impacts. The IS/MND makes all efforts to disclose the realistic impact of the project as proposed.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment K3

The commenter states that, "Additionally, the document contains typos, missing pieces and confusing dogma. Very hard to understand and interpret. Finally, this project is not compliant with the City General Plan 2025 or the Northside Community Plan of 1991. The community has long been against industrial development in this area even when redevelopment overpowered the objections. Zoning changes from that time do not agree with the general plan and need to be changed. Redevelopment is gone, the zoning and concept of it in the Northside needs to go too. Please to not accept this submitted Mitigated Negative Declaration." Also, please see Response to Comment F2 above.

Response

We appreciate the opportunity to correct typos in the document as a result of this Response to Comments effort; however, while inconvenient, the typos do not affect the meaning of the text or the analysis. The Northiside Community Plan was folded into the General Plan 2025. As discussed in Response F2, the General Plan includes Goals and Policies with the purpose of limiting any redesignations or rezoning of land from industrial use… [and to] avoid encroachments of incompatible land uses within close proximity of industrial land (Policy LU-24.2), to add to the City's industrial land base where logically and physically possible to do so (Objective LU-25) and to, identify opportunities to redevelop older, underutilized properties (Policy LU-25.4). The proposed project site is located in an area of the City characterized by light industrial and industrial storage uses and would not be an appropriate location for residential or commercial uses. The proposed project site is surrounded by industrial uses to the west, industrial uses and vacant land zoned for industrial use to the north, industrial uses and vacant residences scheduled for demolition to the east, and open space and recreation uses to the south. Moreover, the proposed site is physically capable of supporting the proposed speculative warehouse use and is a logical location for such a use given its proximity to freeways and other industrial land uses. Finally, the proposed project site is an older, underutilized site, part of which contains abandoned residences and part of which was formerly used for agriculture. As such, the proposed project is appropriate for the proposed site given the goals and objectives for industrial land found in the City's General Plan

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment K4

The commenter states that, "This project would be in conflict with the Riverside 2.0 and Carbon Action Plan initiatives. Currently the land which has never been developed (covered with concrete, etc.) is sequestering a tremendous amount of carbon each year. I [sic] truly great service to our community and environment. If this project goes through not only with [sic] that ongoing benefit be lost but the amount of carbon released through the disturbance of the soil and through the vehicles associated with the facility will substantially increase our carbon footprint. Additionally, I understand there has already been unpermitted grading at the site. To me this indicates the intention of the project to disregard the rules and decreases my confidence in their truly mitigating their impacts."

Response

The commenter is correct when stating that undeveloped land with any kind of vegetation (especially trees) will sequester better than land that has been "covered with concrete". However, the proposed site has been designated in

local plans, including the General Plan and the Northside Community Plan, for Business Park and Manufacturing uses. As such, the site is not intended for carbon sequestration purposes in the Carbon Action Plan as the commenter asserts. Adherence to the Green Building Code and Municipal Code Chapter 19.570 (Water Efficient Landscaping and Irrigation) will ensure the project is constructed to meet State and local green building standards and will help to offset the impacts that occur when developing a previously undeveloped site. Regarding permits, the proposed project is required to have grading and building permits prior to initiation of earth moving and construction activities and said permits will be obtained by the project proponent. Grading on the northeast portion of the site is not related to this proposed project.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Letter L: Nancy Melendez, Spanish Town Heritage Foundation

Spanish Town Heritage Foundation

September 30, 2016

Brian Norton, Senior Planner
City of Riverside Community Development Department
3900 Main Street, 3rd Floor
Riverside, California 92522

RE: Comments on Case P14-1033

Dear Mr. Norton:

The timing of the preparation and release of the CEQA Study/Mitigated Negative Declaration for Case P14-1033 was prior to a significant action taken by the National Park Service designating the Riverside-San Bernardino route as part of the Old Spanish National Historic Trail and further listing the Trujillo Adobe as a site of "high potential." Please review the Final Comprehensive Administrative Strategy of the National Park Service at: https://parkplanning.nps.gov/document.cfm?documentID=74062 L1

Secondly, page 76 which discusses the operational vibration and the Konan and AASHTO criteria, states the continuous threshold PPV is .12 and .10 for Historic sites. The criteria is using a standard of measure and does not state the various conditions of the structure. We can only assume that the historic site is free standing and that is clearly not the case of the historic Trujillo Adobe, which currently has only three walls, and is supported by wood beams and is extremely sensitive. Recently, the County of Riverside, suggested that visits and tours to the site be reduced because of its fragile state. L2

Another issue that has not been addressed is airborne vibration. The noise of passing buses and trucks can induce vibrations, especially if buildings are close to the road. These airborne vibrations occur at higher frequencies than soil-borne vibrations and cause rattling of all structures especially adobe structures. Adobe bricks are made of dirt and are extremely sensitive to airborne vibration. L3

On behalf of the Spanish Town Heritage Foundation, we request that you reject the CEQA report as presented and: L4

- Review the National Park Service and Bureau of Land Management Final Comprehensive Administrative Strategy to determine its significant impact on development adjacent to a site of "high potential," the Trujillo Adobe.
- Investigate the Konan and AASHTO standards used in the report to see if they were properly applied.
- Investigate the effects of airborne vibrations on the Trujillo Adobe.

Yours truly,

Nancy Melendez, President
Spanish Town Heritage Foundation

(951) 235-3586 • www.spanishtownheritageFDN.weebly.com

Comment L1

The commenter states that, "The timing of the preparation and release of the CEQA Study/ Mitigated Negative declaration for Case P14-1033 was prior to a significant action taken by the National Park Service designating the Riverside-San Bernardino route as part of the Old Spanish National Historic Trail and further listing the Trujillo Adobe as a site of 'high potential'." The commenter also expresses concerns about operational vibrations impacting the Trujillo Adobe.

Response

The proposed project site is located approximately a quarter mile to the west of the Trujillo Adobe in an area characterized by light-industrial land uses. There are also a number of automobile wreckage/storage sites located in the immediate vicinity if the project site and the adobe. Truck traffic currently operates along Center Street. Although the Trujillo Adobe is designated as a site with *potential* for historical development as part of the Old Spanish Historic National Trail, it is not currently formally designated as part of the historic trail system. Moreover, according to maps of the Old Spanish National Historic Trail, the southern-most spur of the trail stops in the City of Colton, approximately 5 miles north of the project site and the adobe.

Construction and operation of the proposed warehouse building will not impact either the Trujillo Adobe or the Old Spanish National Historic Trail. The proposed project will not include demolition of the Trujillo Adobe or physical changes to the Old Spanish Historic Trail. Further, as shown in Response to Comment C2 above, vibration impacts to the adobe will not occur. Given the proximity of project site to the adobe and the trail, and given the existing character of the project area, the project will not cause a substantial adverse change in the significance of a historical resource within the traditional location of the Old Spanish National Historic Trail. Further, as previously noted, the cultural resources section of the IS/MND includes mitigation measures that include requirements for archaeological sensitivity training for construction personnel, monitoring of construction excavations, the implementation of a treatment plan should archaeological resources be uncovered, and the preparation of a construction monitoring report upon completion. This mitigation is sufficient to ensure that impacts to buried cultural resources will be less than significant.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment L2

The commenter states that, "page 76, which discusses the operational vibration and the Konan and AASHTO criteria, states the continuous threshold PPV is .12 and .10 for Historic sites. The criteria is using a standard of measure and does not state the various conditions of the structure. We can only assume that the historic site is free standing and that is clearly not the case of the historic Trujillo Adobe, which currently has only three walls, and is supported by wood beams and is extremely sensitive. Recently, the County of Riverside suggested that visits and tours to the site be reduced because of its fragile state."

Response

This comment does not provide any substantial evidence that the proposed project will have a significant impact on the Trujillo Adobe. As shown in Table 17 (Construction Vibration Impacts) of the IS/MND, construction-related vibration impacts at the single-family home located approximately 640 feet to the southeast of the project site will be greatest from use of vibratory rollers (0.0031 PPV in/sec). The Trujillo Adobe is located approximately 932 feet to the northeast of the project site. At this distance, vibratory rollers will produce a PPV of 0.0019 in/sec, which is well below the threshold of 0.10 in/sec for historic and sensitive structures. Therefore, construction-related impacts to the adobe will be negligible. In terms of operation-related impacts, namely vibration from truck traffic along Center Street, impacts will also be less than significant. As estimated by Kunzman Associates, the proposed project is anticipated to generate 148 heavy-duty trucks per day, with a maximum of 28 heavy-duty trucks during the AM and PM peak hour. Although truck

trips will occur periodically, the *continuous* threshold has been utilized to provide a worst-case analysis. According to the Caltrans Transportation and Construction Vibration Guidance Manual, truck-related vibration levels of 0.006-0.019 are unlikely to cause damage to buildings of any type. In addition, the Manual shows that the recommended upper limit of vibration to which ruins and ancient monuments should be subjected is 0.080, which would include buildings in the condition of the Trujillo Adobe. The adobe structure is located approximately 88 feet from the centerline of the nearest lane on Center Street. According to Caltrans, the highest truck traffic vibrations generated on freeway shoulders is 0.079 PPV with average speed of 55 mph. At 88 feet, and at speeds well below freeway speeds, the vibration level reaching the Adobe structure is estimated to be 0.015 PPV. This is well below the upper limit of 0.08 recommended for ruins and ancient monuments and within the range whereby vibration impacts from trucks on Center Street are unlikely to cause damage to buildings of any type. Given the distance of the Trujillo Adobe to the project site and Center Street, vibration impacts from construction and operation of the proposed project on the Trujillo Adobe will be negligible. In addition, the Caltrans Transportation and Construction Vibration Guidance Manual provides alternative thresholds, as summarized in Table 18 (Vibration Criteria for Buildings) of the IS/MND. As shown in Table 18, periodic heavy truck traffic occurring along Center Street will not exceed vibration criteria for structural damage to historic and sensitive buildings based on these additional criteria. Therefore, operational vibration impacts will be less than significant. Also, please refer to Response to Comments B1 and C2 above.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment L3

The commenter states that, "another issue that has not been addressed is airborne vibration. The noise of passing buses and trucks can induce vibrations, especially if buildings are close to the road. These airborne vibrations occur at higher frequencies than soil-borne vibrations and cause rattling of all structures especially adobe structures. Adobe bricks are made of dirt and are extremely sensitive to airborne vibration."

Response

This comment does not provide any substantial evidence that the proposed project will have a significant impact on the Trujillo Adobe. Local streets are considered public rights-of-way and are intended for the purpose of the traveling public and the movement of commerce. Moreover, airborne vibration impacts are not required to be analyzed by CEQA. Potential impacts to the Adobe from vibration are addressed in the Response to Comments B1, C2, and I2 above. The environmental analysis is required to represent a project as accurately as is feasible for the sake of full disclosure of any anticipated impacts. The IS/MND makes all efforts to disclose the impacts of vibration to surrounding receptors.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment L4

The commenter states, "On behalf of the Spanish Town Heritage Foundation, we request that you reject the CEQA report as presented and: Review the National Park Service and Bureau of Land Management Final Comprehensive Administrative Strategy to determine its significant impact on development adjacent to a site of 'high potential', the Trujillo Adobe."

Response

This comment does not provide evidence that the proposed project will have a significant impact on the Trujillo Adobe. Local streets are considered public rights-of-way and are intended for the purpose of the traveling public and the movement of commerce. Moreover, airborne vibration impacts are not required to be analyzed by CEQA. Potential impacts to the Adobe from vibration are addressed in the Response to Comment F2 and L2. The environmental analysis is required to represent a project as accurately as is feasible for the sake of full disclosure of any anticipated impacts. The IS/MND makes all efforts to disclose the impacts of vibration to surrounding receptors.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Letter M: Rich Stadler

From: "Rich/Mary Ann Stalder" xcoachrs@sbcglobal.net To: "Norton, Brian" BNorton@riversideca.gov Cc: Date: Mon, 29 Aug 2016 00:58:56 +0000 Subject: [External] Proposed warehouse at Orange, Center, Placentia Streets

Dear Mr. Norton I was born in Riverside in 1939 and have been a resident of Riverside for most of my 76 years. I was fortunate to live in Riverside when it had beauty and a real quality of life. Through these many years I have seen our community leaders destroy what was once the sparkling diamond of the Inland Valley. Yes, that's just what Riverside needs, another WAREHOUSE. Our whole area has now become the Warehouse Capital of the world. I am sure this warehouse would really upgrade the neighborhood. Are you kidding me? Our leaders have destroyed more great neighborhoods in the name of progress to make our city nothing but an eyesore. Go up to the top of Mt. Rubidoux and for 360 degrees all you can see are these monstrosities that bring in more trucks, traffic and smog. Fortunately, I am retired and spend as much time away from the city as possible. I only wish that all of our community leaders would move next door to one of these warehouses. I hope you enjoy the beautiful surroundings, the trucks, the congestion, the smog and the wonderful quality of life that all of these warehouses have brought to Riverside. M1

Respectfully

Rich Stalder xcoachrs@sbcglobal.net 951 204-7193 Sent from my iPad

Comment M1

The commenter voices their opposition to the project based on the creation of traffic, aesthetics impacts, and air quality.

Response

The project is proposed is in accordance with the City General Plan and zoning. All project impacts have been assessed in relation to established thresholds and all impacts have been deemed to be less than significant. This comment has been received and noted.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Letter N: Sala Ponnech

August 31, 2016

RECEIVED
SEP 1 2016
Community & Economic Development Department

Brian Norton, Senior Planner
City of Riverside, Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522

Re: Planning Cases P14-1033 and P14-1034

Dear Mr. Norton:

Having looked over the Mitigated Negative Declaration for this project, I find it deficient in a number of ways.

Project Description (page 6)

The second paragraph on page 6 described the project as follows:

The project includes 110,591 square feet of landscaping, the potential for up to 282 parking stalls and 47 loading docks.

The Conceptual Grading Plan show a total of 62 loading docks, 47 along the Placentia Lane side and 15 on the west side. This is a significant difference although 47 loading docks already seem more than what is necessary for a manufacturing facility. The number of parking spaces is also misstated as 282 although the Site Plan calls for 404 (or 368) parking stalls. These misstatements are material because basing analyses on flawed input makes it more likely that conclusions will be skewed toward "no significant impact". N1

Determination (page 23)

I disagree that a Mitigated Negative Declaration is appropriate when one considers the problems with analyses of individual environmental factors, which I will discuss in more detail below. N2

Aesthetics (page 25)

The proposed building will have a maximum height of 47 feet at the northern corners. I assume the rest of the building will comply with the 45-foot height limit. If I stood on Placentia Lane and faced the building, I would not be able to see the existing vista. The fact that the "project site and vicinity are not designated by the City's General Plan for the preservation or uniqueness of scenic views" does not do N3

away with CEQA's requirement to consider them. The authors of this study do not explain how they jumped to the conclusion that the "balance between development interests and broader community preservation objective (*sic*)" tilts in the direction of development interests. At this point, the project may be the only structure planned for this area but others are sure to follow and further obscure the vista.

As for the effect on ambient light in the vicinity, this project is enormous. The study's authors claim:

> *There is currently substantial nighttime lighting in the surrounding areas of the project site due to surrounding developments and the general urban character of the area. (page 26)*

The study characterizes the vicinity as urban. That term implies a degree of development that could generate significant light pollution. I am at Reid Park at night at least once a month and I would not describe the adjoining neighborhood (from the park down to the corner of Placentia Lane and Orange Street) as well lit. I do not know exactly how much light is thrown off by the existing businesses but material storage yards, sports fields and towing companies are not huge buildings that require extensive outdoor lighting and whose indoor lighting could be exposed at night through truck bays. If trucks arrive and depart throughout the night, their headlights would add to the light produced by the facility itself. N4

Air Quality (page 29)

> *The project would result in short-term construction and long-term pollutant emissions that are less than the CEQA significance emissions thresholds established by the SCAQMD...therefore the project could not result in an increase in the frequency or severity of any air quality standards violation and will not cause a new air quality standard violation.* N5

Table 2 on page 30 summarizes the South Coast air Basin Attainment Status. The Basin is already out of compliance with state standards on levels of four air pollutants. This study appears to argue that because the air is already so bad, this project cannot make it worse, so why worry. That is not an argument I find acceptable even if air quality complies with AQMD regulations in a strictly legal sense.

Turning to the section on Operational Emissions on page 31, the study discusses how it calculated mobile source emissions:

> *CalEEMod defaults were used for trip length, prime and no-primer trip* N6

percentages and trip purpose in light of the proposed project being assessed as manufacturing us (sic).

Although the authors of this report admit they are not certain about the ultimate use of this building (see page 6), they used the manufacturing default data. I cannot understand that a manufacturing facility would require 62 loading docks. Given the growth of the logistics industry in the inland area and its popularity with the Powers That Be, it is most likely this facility will be a warehouse/distribution center. In that scenario, the fleet mix will probably consist of a much greater percentage of medium-heavy duty and heavy-heavy duty trucks than the figure used in this report. Furthermore, CalEEMod shows that warehouses without rail service would have an average daily trip rate of 2.59 per 1000 square feet per day while manufacturing facilities have an average daily trip rate of 1.97 per 1000 square feet. My averages were based upon CalEEMod Table 4.3: Mobile Trip Rates, Trip Purpose, Trip Type by Land Use.

It is also difficult to believe that a warehouse would have only five fork lifts operating inside the facility, as stated on page 31. N7

The report also states that operational emissions will have a less than significant impact on sensitive receptors, including athletes. In discussing whether or not the proposed building will impact surrounding receptors, the report states that "The proposed building does not have a tenant and is speculatively considered for manufacturing uses, thus the type and extent of on-site stationary or on-site mobile sources is unknown." (page 33). The authors then estimate the internal equipment will consist of three (not five as previously stated)) forklifts and one generator. Combining these estimates with a flawed analysis of vehicle emissions, the report concludes no criteria pollutant will be emitted that will exceed applicable LST's. N8

On page 35, the report delves into the question of how toxic emissions from the facility would impact the Ab Brown Sports Complex directly across the street from the loading docks. It does not consider the effects on Reid Park, also a sports and recreation center. N9

The use of a manufacturing model versus a warehousing model to calculate air quality impacts is a material misrepresentation of the situation. The air quality analysis also exposes a major weakness in this study (and maybe many CEQA studies: it considers only the project site and not the ripple effects from the project. For example, increased truck traffic from Center to the I-215 or down Main to the 60 (and from the freeways to the proposed warehouse) means more trucks idling as they slow down for turns, wait for lights or idle while stuck on freeway entries or exits. Students at Fremont School near the intersection of Main and the 60 could be exposed to increased combustion pollution all day during the schools year. That is a N10

different risk pattern than the one facing users of the sports complex or park. Even if big rigs would not be "allowed" to travel down Main to the 60, it will be tempting for them to do so.

Cultural Resources (page 41)

According to records research, there are seven prehistoric sites, 27 historic-period sites, three "pending" sites and five isolates within a one mile radius of the project site. However, only one of these sites, an abandoned house, is located on the project site, so the report does not treat the rest of them. Again, this underscores the failure to put the project in context. An area this rich in cultural resources, including the site of the important La Placita/Agua Mansa settlement, should be developed very carefully, if at all. On page 43, the report recognizes the Trujillo Adobe but claims it will not be disturbed by activities on the site. The report does not consider the potential impact of increased daily truck traffic along Center Street on what is already an extremely fragile building. N11

Note also that the vicinity is characterized as "rural" on page 42, whereas in the ambient light impact analysis it was described as "urban". This is an important distinction. Failure to properly classify the area is a material misrepresentation. N12

The Historical/Archaeological Resources Survey Report appendix deals at great length with the one historical structure (six associated buildings) on the project site. The site evaluation on page 15 states that the construction of these buildings postdates La Placita and is "more closely associated with a time when the area underwent a prolonged period of slow, agrarian growth as a sparsely populated outskirt of Riverside." But in the same paragraph, the report states "they do not demonstrate a particularly close or important association with this pattern of events, or with any other established historic themes." Is there a close association or not? I noticed that Table 1 on page 11 shows the property was inhabited by C.S. Densmore. There are Densmores living in the City of Riverside, one of them being former City Councilperson Laura Pearson Densmore. There is no indication that the authors of this report attempted to locate or speak with any Densmores about this property. They might have been able to shed some light on the history of these buildings. N13

Hydrology and Water Quality (page 59)

On page 62 we are assured that

...project related storm water flows will be directed to the proposed infiltration basin and infiltrate into the soil. The proposed water quality function of the basin would reduce the amount of polluted runoff that would be conveyed into the ground water. N14

Water quality is discussed in Section 3.9 of the report. I could not find this section. However, I wonder how it is that collecting polluted runoff into an infiltration basin will ultimately reduce the amount of pollution entering ground water without on-site treatment. The WQMP Exhibit Detail "A" shows the components of the infiltration trenches but there is no explanation of how they work to clean water or for how long they would operate efficiently without being cleaned or rebuilt. Assuming that the trenches do their job and are maintained, I wonder how the property owners would dispose of the polluted materials.

The project site itself is only about .7 miles from the Santa Ana River (page 62) although Table A-2 in Appendix F implies that receiving waters are much further away. The implication is that pollution from ground water is not likely to reach the river. I do not know if ground surface distance from the project site to the river bed is even the best measurement if ground water flows underground. Although the City of Riverside draws its water from aquifers upstream from the project site, that does not mean the City will not draw water from downstream in the future. N15

The source control best management practices listed in Section G are commendable but there is no mechanism for policing these requirements. I suppose one could say that about every CEQA requirement, but I think risk of noncompliance is less tolerable in matters concerning water quality. N16

My conclusion is that given the semi-rural character of this part of the Northside, its cultural sensitivity and its proximity to a river, large industrial/warehousing development is inappropriate.

Yours truly,

Sala Ponnech

Sala Ponnech

Comment N1

The commenter states, "Having looked over the Mitigated Negative Declaration for this project, I find it deficient in a number of ways. Project Description (page 6): The second paragraph on page 6 described the project as: 'The project includes 110,591 square feet of landscaping, the potential for up to 282 parking stalls and 47 loading docks'. [However], the Conceptual Grading Plan shows a total of 62 loading docks, 47 along the Placentia Lane side and 15 on the west side. This is a significant difference although 47 loading docks already seem more than what is necessary for a manufacturing facility. The number of parking spaces is also misstated as 282 although the site plan calls for 404 (or 368) parking stalls. These misstatements are material because basing analyses on flawed input makes it more likely that conclusions will be skewed toward 'no significant impact'."

Response

This comment has been received and noted. The commenter provides no substantial evidence, but rather unsubstantiated opinion concerning the assertion that there are too many loading docks. In any case, this assertion does not constitute an environmental impact and need not be analyzed under CEQA In terms of the discrepancy in numbers, the number of stalls proposed to be provided by the project has been changed from "368", which is the required number of stalls, to "404" which is the actual number of stalls being proposed. This number properly reflects the number of stalls shown on the project site plan, which shows the provision of 167 passenger vehicle stalls along Center Street and 237 stalls within the truck bay area. Also, please refer to Response to Comment K1 above.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N2

The commenter states that, "I disagree that a Mitigated Negative Declaration is appropriate when one considers the problems with analyses of individual environmental factors, which I will discuss in more detail below."

Response

This comment has been received and noted.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N3

The commenter states that, "The proposed building will have a maximum height of 47 feet at the northern corners. I assume the rest of the building will comply with the 45-foot height limit. If I stood on Placentia Lane and faced the building, I would not be able to see the existing vista. The fact that the 'project site and vicinity are not designated by the City's General Plan for the preservation or uniqueness of scenic views' does not do away with CEQA's requirement to consider them. The authors of this study do not explain how they jumped to the conclusion that the 'balance between development interests and broader community preservation objective [sic]' tilts in the direction of development interests. At this point, the project may be the only structure planned for this area but others are sure to follow and further obscure the vista."

Response

The proposed warehouse project is consistent with both the BMP-Business and Manufacturing Park Zone land use designation and Policies LU 105-110 of the General Plan 2025. Exhibits with the project site plan and elevations that show the height of the proposed building have been included in the IS/MND. The main mass of the building is 41- to 43-feet tall with screening going up to 47-feet tall, which is permitted under the City's zoning height restrictions. Also, please see Response to Comment F2 above.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N4

The commenter states that, "As for the effect of ambient light in the vicinity, this project is enormous. The study's authors' claim: 'There is currently substantial nighttime lighting in the surrounding areas of the project site due to surrounding developments and the general urban character of the area'. The Study characterizes the vicinity as urban. That term implies a degree of development that could generate significant light pollution. I am at Reid Park at the night at least once a month and I would not describe the adjoining neighborhood (from the park down to the corner of Placentia Lane and Orange Street) as well lit. I do not know exactly how much light is thrown off by the existing businesses but material storage yards, sports fields and towing companies are not huge buildings that require extensive outdoor lighting and whose indoor lighting could be exposed at night through truck bays. If trucks arrive and depart throughout the night, their headlights would add to the light produced by the facility itself."

Response

The project site is surrounded by material storage yards to the north, a towing company to the east, and the AB Brown Sports Complex to the south. There is currently substantial nighttime lighting in the surrounding areas of the project site due to surrounding developments and the general urban character of the area. There are no residential uses in close proximity to the project site that could be directly affected by new sources of light. All project lighting will be required to comply with the development standards contained in the City's Zoning Code (Title 19), Chapter 19.590 (Performance Standards) which requires that "…on-site lighting be arranged as to reflect away from adjoining property or any public streets. Light shall not be directed skyward or in a manner that interferes with aircraft operation." Addition of new sources of permanent light and glare as a result of implementation of the proposed project would not significantly increase ambient lighting in the project vicinity. Moreover, due to the built nature of the project area, there is a significant existing amount of ambient light both in the project area and in the immediate surrounding vicinity.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N5

The commenter states, "Table 2 on page 30 summarizes the South Coast Air Basin Attainment Status. The Basin is already out of compliance with state standards on levels of four air pollutants. This study appears to argue that because the air is already so bad, this project cannot make it worse, so why worry. That is not an argument I find acceptable even if air quality complies with AQMD regulations in a strictly legal sense."

Response

This comment has been received and noted. While the commenter does not agree with the results of the analysis, he/she does not state how or why the analysis is deficient. The Air Quality analysis was prepared in accordance with *Table 7-2, Checklist for an Air Quality Analysis* Section of the SCAQMD Air Quality Handbook and impacts were determined to be less than established SCAQMD criteria pollutant emissions thresholds. Therefore, impacts will be less than significant.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N6

The commenter states that, "Turning to the section on Operational Emissions on page 31, the study discusses how it calculated mobile source emissions… Although the authors of this report admit they are not certain about the ultimate use of the building (see page 6), they used the manufacturing default data. I cannot understand that a manufacturing facility would require 62 loading docks. Given the growth of the logistics industry in the inland area and its popularity with the Powers That Be, it is most likely this facility will be a warehouse/distribution center. In that scenario, the fleet mix will probably consist of a much greater percentage of medium-heavy duty and heavy-heavy duty trucks than the figure used in this report. Furthermore, CalEEMod shows that warehouses without rail service would have an average daily trip rate of 2.59 per 1,000 square feet per day while manufacturing facilities have an average daily trip rate of 1.97 per 1,000 square feet. My averages were based upon CalEEMod Table 4.3: Mobile Trip Rates, Trip Purpose, Trip Type by Land Use."

Response

The project proposes a speculative industrial building which could be occupied by one or more of a variety of tenants ranging from office to manufacturing to warehouse uses. In order to evaluate a wide variety of potential uses, the project was evaluated with 80/20 (truck/auto) percent fleet mix in the traffic study and for both manufacturing and warehouse uses in the project air quality study. This fleet mix is supported by substantial evidence and is widely used to characterize trucks trips from warehouse uses. The Project is not proposed as a refrigerated building; thus, it would be speculative to analyze it as such. If in the future the Project were to include a refrigerated component, then the Project's entitlements and adopted environmental review documentation would need to be reopened to consider the changes to the Project. Because the proposed building is speculative in nature, actual tenants are not known; therefore, default output settings were used to analyze different uses including unrefrigerated warehouse and manufacturing. The Initial Study/Mitigated Negative Declaration makes all efforts to disclose the use of default model input parameters and their assumptions. The characteristics of the vehicular fleet mix for this project is represented in the air quality study in terms of mix of vehicles and variation in trip length in order to fully characterize the project. Addressing these variations solely through fleet mix would result in unaccounted for trips at varying distances that could distort the emissions estimates for the Project. There are different approaches and assumptions that can be used in projecting the impacts of a development project on the environment, which include the use of computer modeling programs that utilize default inputs. CEQA requires that the City consider only reasonable assumptions supported by substantial evidence in estimating the impacts of a project in order to avoid speculative analysis and conclusions that can be wrought from use of unsubstantiated claims or excessively "worst-case" scenarios. The environmental analysis is required to represent a project as accurately as is feasible for the sake of full disclosure of anticipated impacts. Because the proposed building is speculative in nature, actual tenants are not known; therefore, default output settings were used to analyze different uses including unrefrigerated warehouse and manufacturing. The IS/MND discloses the use of default model input parameters and their assumptions.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been

identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N7

The commenter states that, "It is also difficult to believe that a warehouse would have only five forklifts operating inside the facility, as stated on page 31."

Response

The environmental analysis is required to represent a project as accurately as is feasible for the sake of full disclosure of anticipated impacts. Because the proposed building is speculative in nature, actual tenants are not known; therefore, default output settings were used to analyze the proposed project, which includes the number of forklifts that are likely to be used during normal operation. This default output setting was created based upon the number of forklifts used in similar land uses and similarly sized buildings.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N8

The commenter states that, "The report also states that operational emissions will have a less than significant impact on sensitive receptors, including athletes. In discussing whether or not the proposed building will impact surrounding receptors, the report states that 'the proposed building does not have a tenant and is speculatively considered for manufacturing uses, thus the type and extent of on-site stationary and on-site mobile sources is unknown' (page 33). The authors then estimate the internal equipment will consist of three (not five as previously stated) forklifts and one generator. Combining these estimates with flawed analysis of vehicle emissions, the report concludes no criteria pollutant will be emitted that will exceed applicable LST's."

Response

The environmental analysis is required to represent a project as accurately as is feasible for the sake of full disclosure of anticipated impacts. Because the proposed building is speculative in nature, actual tenants are not known; therefore, default CalEEMod input settings were used to analyze the proposed project, which includes the number of forklifts that are likely to be used during normal operation. The reference in the IS/MND to three forklifts was a typo and has been changed to reflect the correct number of forklifts (five) that were included in the model. This increase in the number of forklifts does not affect the conclusions of the IS/MND. The IS/MND makes all efforts to disclose the use of default model input parameters and their assumptions. Localized significance thresholds were analyzed according to CEQA guidelines, and a worst-case scenario was assessed in terms of the potential future use of the development. Impacts remain less than significant.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N9

The commenter states that, "On page 35, the report delves into the question of how toxic emissions from the facility would impact the AB Brown sports Complex directly across the street from the loading docks. It does not consider the effects on Reid Park, also a sports and recreation center.

Response

Given the fact that the analysis showed the proposed project would have a less than significant impact on sensitive receptors located at the AB Brown Sports Complex located immediately adjacent to the project, it can be fairly assumed that the project will not have significant impacts on sensitive receptors at Reid Park given the fact that Reid Park is located southeast of the AB Brown Sports Complex, approximately 0.23 miles from the proposed project site.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N10

The commenter states that, "The use of a manufacturing model versus a warehousing model to calculate air quality impacts is a material misrepresentation of the situation. The air quality analysis also exposes a major weakness in this study (and maybe many CEQA studies): it considers only the project site and not the ripple effects from the project. For example, increased truck traffic from Center to the I-215 or down Main to the 60 (and from the freeways to the proposed warehouse) means more trucks idling as they slow down for turns, wait for lights, or idle while stuck on freeway entries or exits. Students at Fremont School near the intersection of Main and the 60 could be exposed to increased combustion pollution all day during the schools [sic] year. That is a different risk pattern than the one facing used of the sports complex or park. Even if big rigs would not be 'allowed' to travel down Main to the 60, it will be tempting for them to do so."

Response

The project proposes a speculative industrial building which could be occupied by one or more of a variety of tenants ranging from office to manufacturing to warehouse uses. The manufacturing use was assessed because that use represented the "worst case" scenario (except for the refrigerated warehouse use which is not proposed for this project). However, an assessment of impacts based on the unrefrigerated warehouse use was also conducted using CalEEMod (see Attachment A). Slight differences in emissions occurred as a result of employing these different land uses in the model- most notably that the manufacturing use has a greater impact than the unrefrigerated warehouse use. However, it was determined that both uses would still generate emissions levels below established thresholds. Included in this response below are the two emissions tables showing the differences in emissions between the two uses. The environmental analysis is required to represent a project as accurately as is feasible for the sake of full disclosure of anticipated impacts. Because the proposed building is speculative in nature, actual tenants are not known; therefore, it would be considered speculative analysis to analyze the project in the context of the refrigerated warehouse default setting, which is prohibited by CEQA. If in the future the Project were to include a refrigerated component, then the Project's entitlements and adopted environmental review documentation would need to be reopened to consider the changes to the Project. Because the proposed building is speculative in nature, actual tenants are not known; therefore, default output settings were used to analyze different uses including unrefrigerated warehouse and manufacturing. The Initial Study/Mitigated Negative Declaration makes all efforts to disclose the use of default model input parameters and their assumptions. Moreover, CalEEMod includes analysis of cumulative project impacts, which is based on information from the project Traffic Impact Analysis report. Chapter 10.56 (Restricted Use of Certain Streets) lists the City streets where trucks of a certain tonnage are prohibited. Trucks associated with the proposed project will have direct access to the site from Center Street, which connects the project with I-215 to the east. While trucks are permitted by the City on Placentia Lane, the project has been designed such that all truck traffic associated with the project will enter and exit from the driveways on Center Street. Moreover, truck traffic is not allowed on Main Street south of Columbia Avenue,

meaning the proposed project will not have direct access to SR-60 via Main Street. In addition, the project Health Risk Assessment shows that increases in truck traffic along Center Street as a result of the proposed project will not significantly impact nearby sensitive receptors. The IS/MND makes all efforts to disclose the use of default model input parameters and their assumptions as well as truck traffic emissions. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N11

The commenter states that, "According to the records search, there are seven prehistoric sites, 27 historic-period sites, three 'pending' site and five isolates within a one mile radius of the project site. However, only one of these sites, an abandoned house, is located on the project site, so the report does not treat the rest of them. Again, this underscores the failure to put the project in context. An area this rich in cultural resources, including the site of the important La Placita/Agua Mansa settlement, should be developed very carefully, if at all. On page 43, the report recognizes the Trujillo Adobe but claims it will not be disturbed by activities on the site. The report does not consider the potential impact of increased daily truck traffic along Center Street on what is already an extremely fragile building."

Response

This comment does not provide evidence that the proposed project will have a significant impact on the Trujillo Adobe. Local streets are considered public rights-of-way and are intended for the purpose of the traveling public and the movement of commerce. As shown in Table 17 (Construction Vibration Impacts) of the IS/MND, construction-related vibration impacts at the single-family home located approximately 640 feet to the southeast of the project site will be greatest from use of vibratory rollers (0.0031 PPV in/sec). The Trujillo Adobe is located approximately 932 feet to the northeast of the project site. At this distance, vibratory rollers will produce a PPV of 0.0019 in/sec, which is well below the threshold of 0.10 in/sec for historic and sensitive structures. Therefore, construction-related impacts to the adobe will be negligible. In terms of operation-related impacts, namely vibration from heavy truck traffic along Center Street, the IS/MND shows that the recommended upper limit of vibration to which ruins and ancient monuments should be subjected is 0.080 and that truck-related vibration levels of 0.006-0.019 are unlikely to cause damage to buildings of any type, which would include buildings in the condition of the Trujillo Adobe. The structure is located approximately 88 feet from the centerline of the nearest lane on Center Street. According to Caltrans, the highest truck traffic vibrations generated on freeway shoulders is 0.079 PPV. At 88 feet, and at speeds well below freeway speeds, the vibration level reaching the Adobe structure is estimated to be 0.015 PPV. This is well below the upper limit of 0.080 recommended for ruins and ancient monuments and within the range whereby vibration impacts from trucks on Center Street are unlikely to cause damage to buildings of any type. Given the distance of the Trujillo Adobe to the project site and Center Street, vibration impacts from construction and operation of the proposed project on the Trujillo Adobe will be negligible. The environmental analysis is required to represent a project as accurately as is feasible for the sake of full disclosure of any anticipated impacts. The IS/MND makes all efforts to disclose the impacts of vibration to surrounding receptors. Finally, the purpose of identifying the other prehistoric and historic sites and the isolates is to identify the need for onsite monitoring during grading in case such elements or artifacts are unearthed during grading. Mitigation Measures CUL-1 through CUL-5 have been included in the MND to ensure that, if found, any such elements or artifacts are properly treated. Therefore, the proposed project was analyzed in the proper context and the determination in the IS/MND was sufficient for the purposes of CEQA.

The proposed project site is located approximately a quarter mile to the west of the Trujillo Adobe in an area characterized by light-industrial, commercial, residential, and vacant land uses. There are also a number of automobile wreckage/storage sites located in the immediate vicinity if the project site. Although the Trujillo Adobe is designated as a site with potential for historical development as part of the Old Spanish Historic National Trail, given the distance from the proposed project site and the existing character of the project area, the project will not cause a substantial adverse

change in the significance of a historical resource within the traditional location of the La Placita/Agua Mansa settlement.

Further, as noted, the cultural resources section of the IS/MND includes mitigation measures that include requirements for archaeological sensitivity training for construction personnel, monitoring of construction excavations, the implementation of a treatment plan should archaeological resources be uncovered, and the preparation of a construction monitoring report upon completion. This mitigation is sufficient to ensure that impacts to buried cultural resources will be less than significant.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N12

The commenter states that, "Note also that the vicinity is characterized as 'rural' on page 42, whereas in the ambient light impact analysis it was described as 'urban'. This is an important distinction. Failure to properly classify the area is a material misrepresentation."

Response

Page 42 of the Initial Study states that Historical Research databases have characterized the La Placita area of the City as largely unchanged from its original rural character. However, the City as a whole, and surrounding neighborhoods around the site, has undergone substantial urbanization and the characterization of the project vicinity as "urban" is accurate given existing conditions. This distinction does not compromise the validity of the analysis provided in the Initial Study.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N13

The commenter states that, "The Historical/Archaeological Resources Survey Report appendix deals at great length with the one historical structure (six associated buildings) on the project site. The site evaluation on page 15 states that the construction of these buildings postdates La Placita and is 'more closely associated with a time when the area underwent a prolonged period of slow, agrarian growth as sparsely populated outskirts of Riverside'. But in the same paragraph, the report states 'they do not demonstrate a particularly close or important association with this pattern of events, or with any other established historic themes'. Is there a close association or not? I noticed that Table 1 on page 11 shows the property was inhabited by C.S. Densmore. There are Densmores living in the City of Riverside, one of them being former City Councilperson Laura Pearson Densmore. There is no indication that the authors of this report attempted to locate or speak with any Densmores about this property. They might have been able to shed some light on the history of these buildings."

Response

The commenter appears to have misunderstood the analysis found in the Historical/Archaeological Resources Survey Report. The report states that the building on-site came AFTER the historic era when the area retained an independent

community identity as the Spanish-speaking village of La Placita. The report correctly states that the building has a close association with the period of slow, agrarian growth that post-dated the La Placita period, and was not a part of the established community identity of La Placita. While the on-site building is reflective of this agrarian period, and retains sufficient historic integrity to relate to that period, it does not demonstrate a particularly close or important association with this pattern of events, or with any other established historic themes.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N14

The commenter states that, "Water Quality is discussed in Section 3.9 of the report. I could not find this section. However, I wonder how it is that collecting polluted runoff into an infiltration basin will ultimately reduce the amount of pollution entering ground water without on-site treatment. The WQMP Exhibit Detail 'A' shows the components of the infiltration trenches but there is no explanation of how they work to clean water or for how long they would operate efficiently without being cleaned or rebuilt. Assuming that the trenches do their job and are maintained, I wonder how the property owners would dispose of the polluted materials."

Response

This comment has been received and noted. Section labels have been changed for ease of use. Moreover, an explanation of how infiltration basins capture and clean water before discharging into groundwater has been included in the Final Initial Study and is summarized herein:

An infiltration basin is a shallow impoundment that is designed to infiltrate stormwater into the soil. Infiltration basins have a high pollutant removal efficiency, and can also help recharge the groundwater, thus restoring low flows to stream systems. Infiltration basins recharge the groundwater because runoff is treated for water quality by filtering through the soil and discharging to groundwater. A Project Specific Preliminary Water Quality Management Plan (WQMP) has been prepared for the proposed project and is included in Appendix F of the IS/MND. The WQMP indentifies proposed drainage management areas and the effectiveness of proposed BMPs. According to the WQMP, the design capture volume required to capture on-site runoff is 1,904.6 cubic feet. The proposed infiltration basins are proposed to capture approximately 2,035 cubic feet of runoff and infiltrate at a rate of ten inches per hour. According to the WQMP, proposed Low Impact Development (LID) BMPs fully address all drainage management areas and no alternative compliance measures are required for the proposed project. Moreover, the design of the infiltration basin is consistent with State standards for required water treatment infrastructure.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N15

The commenter states that, "The project site itself is only about 0.7 miles from the Santa Ana River (page 62) although Table A-2 in Appendix F implies that receiving waters are much further away. The implication is that pollution from groundwater is not likely to reach the river. I do not know if ground surface distance from the project site to the river bed is even the best measurement if groundwater flows underground. Although the City of Riverside draws its water

from aquifers upstream from the project site, which does not mean the City will not draw from downstream in the future."

Response

The receiving water in the project vicinity is the Santa Ana River and its tributaries. With implementation of infiltration basins, pollution from stormwater runoff will not be discharged into the groundwater. Therefore, the assertion that pollution from groundwater is not likely to reach receiving waters of the river is accurate. Please see the Response to Comment N14 above for a summary of how infiltration basins will treat the stormwater before it reaches the river.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment N16

The commenter states that, "the source control best management practices listed in Section G are commendable but there is no mechanism for policing these requirements. I suppose one could say that about every CEQA requirement, but I think risk of non-compliance is less tolerable in matter concerning water quality."

Response

All feasible mitigation was considered when evaluating potentially significant impacts. Best Management Practices will be enforced by the Regional Water Quality Control Board and the City Public Works Director. Failure to adhere to BMP's for stormwater runoff can result in the halting of work, loss of permits, and/or fines. No additional mitigation needs to be considered for this project because no new, potentially significant impacts have been identified that were not already evaluated in the Initial Study and no proposed mitigation was found to be deficient.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

STATE OF CALIFORNIA--CAIIFORNIA STATE TRANSPORTATION AGENCY
DEPARTMENT OF TRANSPORTATION
DISTRICT 8 PLANNING (MS 722)
464 WEST 4" STREET, 6" Floor SAN BERNARDINO, CA 92401-1400

October 3, 2016

Brain Norton, Senior Planner
Community Development Department
Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522

Planning Case P14-1033 and P14-1034 (RIV 215 PM 44.93)

Mr. Norton,
We have received and reviewed your comment letter dated August 24, 2016 for the above mentioned proposal for consideration of a design to construct an approximately 308,000 square foot warehouse and a Lot Merger to consolidate four (4) parcels into one parcel totaling approximately 15.90 acres.

As the owner and operator of the State Highway System (SHS), it is our responsibility to coordinate and consult with local jurisdictions when proposed development may impact our facilities. Under the California Environmental Quality Act (CEQA), we are required to make recommendations to offset associated impacts with the proposed project. Although the project is under the jurisdiction of the City of Riverside due to the Project's potential impact to State facilities it is also subject to the policies and regulations that govern the SHS.

We recommend the following;

- Page #18. Appendix B -the scoping agreement with the City (pg. #87) does not have approved scoping agreement signatures. O1
- Page #20. Why the existing intersection turning movements counts were obtained during the month of December 10, 2015? Please provide plots with (readable traffic volumes) showing AADT and AM/PM Peak Hours for all modeled years with PCEs. O2
- Page #24. At intersection #1 Riverside Avenue/Center Street there is no traffic control for northbound direction; therefore, De Facto will not be implied for this movement. O3

- Page #26. Please note that all traffic volumes figures provided are not balanced. Please balance, or justify the imbalance in these figures. Explain how PCE was incorporated to these volumes counts; and provide plots with readable traffic volumes. O4
- Page #39. Please explain and show how car and truck percentages were obtained on Table 2 -Project Trip Generation. O5

- Page #45. Please explain if the project Peak Hour Intersection Turning Movement Volumes are in PCE and attach plots. O6
- Page 387. Please explain why study for roadway segments and queue analysis were not included. O7
- Page #96. Appendix C contains traffic worksheets, but there is no passenger car equivalent (PCE). Please provide plots for all counts with PCE. O8
- Page #125. Please explain why the northbound right turn movement on the intersection at Iowa Avenue. Main Street shows a zero value for AM & PM (HCS 2010 signalized Intersection Results Summary). O9
- Page #133. Please explain the analysis performed for Main Street. Riverside Avenue signal. It seems that files and results are not consistent with this location. 10

We appreciate the opportunity to offer comments concerning this project. If you have any questions regarding this letter, please contact Talvin Dennis at (909) 806-3957 or myself at (909) 383-4557 for assistance.

Sincerely,

MARK ROBERTS
Office Chief
Intergovernmental Review, Community and Regional Planning

Comment O1

The commenter states, "Page #18: Appendix B – the scoping agreement with the City (pg. 87) does not have approved scoping agreement signatures."

Response

The scoping agreement, and contents within, was verbally approved based on a series of discussions with City of Riverside Traffic Department staff.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment O2

The commenter states, "Page #10: Why the existing intersection turning movements counts were obtained during the month of December 10, 2015? Please provide plots with (readable traffic volumes) showing AADT and AM/PM Peak Hours for all modeled years with PCEs."

Response

The intersection turning movement counts were conducted in adherence to the City of Riverside Traffic Impact Analysis Preparation Guide, 2012 and in consultation with City of Riverside Transportation Department staff regarding the date the counts were to be conducted. The traffic counts were conducted prior to the school district going on Winter break to capture normal school traffic. Figure 4 of the TIA shows the Existing average daily traffic volumes and Figures 5 and 6 show the Existing morning and evening peak hour intersection turning movement volumes, respectively, at the study area intersections. In consultation with City Traffic Department staff, classification counts were not required; however, the project trips shown in Table 2 and Figures 20 through 22 are shown in Passenger Car Equivalent (PCE) trips.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment O3

The commenter states, "Page #24: At Intersection #1 Riverside Avenue/Center Street there is no traffic control for northbound direction; therefore, De Facto will not be implied for this movement."

Response

According to the Caltrans Highway Design Manual, "the width of local roads and streets that are to be reconstructed as part of a freeway project should conform to AASHTO standards…Otherwise the cross section should match the width of the city street adjoining the reconstructed portion, or the cross section should satisfy the local agency's minimum standard for new construction" (Topic 308.1: Cross Sections for Roads Under Other Jurisdictions). According to Section 18.210.030 (Streets) of the Riverside Municipal Code, Arterial Streets with two travel lanes in each direction are required to have lanes that are at least 12 feet wide. With a lane width of approximately 22 feet in the right hand lane of

the northbound direction, sufficient width is provided for through vehicles to pass vehicles turning right onto Center Street (Placentia Lane). Therefore, the requirements for a de facto right turn lane are met, regardless of traffic control.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment O4

The commenter states, "Page #26: Please note that all traffic volumes figures provided are not balanced. Please balance, or justify the imbalance in these figures. Explain how PCE was incorporated to these volumes counts; and provide plots with readable traffic volumes."

Response

The actual peak hour within the two hour peak hour interval is the four consecutive 15 minute periods with the highest total volume when all movements are added together. Due to length between intersections, roadways between these intersections, time needed to travel between intersections, destination points between intersections, et al, traffic volumes from one intersection to the next will not be perfectly balanced. Appendix C of the TIA contains the traffic counts for the study area intersections. The peak hour traffic volumes used in this analysis come directly from the recorded data, without manual adjustments. Please refer to response to Response to Comment N2 regarding passenger car equivalents.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment O5

The commenter states, "Page #39: Please explain and show how car and truck percentages were obtained on Table 2-Project Trip Generation."

Response

The source for the car and truck percentages is the City of Fontana, Truck Trip Generation Study (Page 8 of the Riverside TIA Guidelines), August 2003, as shown in footnote 1 of the project TIA. It is commonly accepted practice throughout Southern California for this study to be utilized in determining the car and truck percentages for this land use.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment O6

The commenter states, "Page # 45: Please explain if the project Peak Hour Intersection Turning Movement Volumes are in PCE and attach plots."

Response

The project trips shown in Table 2 and Figures 20 through 22 of the project TIA are shown in Passenger Car Equivalent (PCE) trips.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment O7

The commenter states, "Page #87: Please explain why study for roadway segments and queue analysis were not included."

Response

The traffic impact analysis was prepared in accordance to the guidelines set forth in the City of Riverside Traffic Impact Analysis Preparation Guide, 2012. Through a series of scoping discussions with City of Riverside Transportation Department staff, the parameters of the traffic impact analysis were set forth. The City of Riverside Transportation Department staff neither requested nor required a roadway segment or queuing analysis.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment O8

The commenter states, "Page #96: Appendix C contains traffic worksheets, but there is no passenger car equivalent (PCE). Please provide plots for all counts with PCE."

Response

Please see Response to Comment N2. In addition, a sensitivity test was conducted for the intersections of West La Cadena Drive at Stephens Avenue/I-215 Freeway SB Ramps (Intersection #6), East La Cadena Drive at Highgrove Place/I-215 Freeway NB Ramps (Intersection #7), and Iowa Avenue/I-215 Freeway NB Ramps at La Cadena Drive (Intersection #9). The sensitivity test utilized a conservative heavy vehicle percentage of three percent and is included in Appendix B of the project TIA. As shown in Appendix B, these study area intersections are projected to operate at acceptable and identical Levels of Service during the peak hours for Opening Year (2017) With Project traffic conditions.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been

identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment O9

The commenter states, "Page #125: Please explain why the northbound right turn movement on the intersection at Iowa Avenue. Main Street shows a zero value for AM & PM (HCS 2010 Signalized Intersection Results Summary)."

Response

The northbound right turning movement is a free right turn lane. To accurately compute the intersection delay using the HCS software, the volume for this movement must be reduced to zero. As stated in the Highway Capacity Manual 2010 (Page 13-9), "Only right turns that are controlled by the signal should be represented in the right-turn volume input to the automobile methodology." Being that this movement is a free right turn lane, these right turn movements are not controlled by the signal and were thus reduced to zero in conformance with the Highway Capacity Manual 2010.

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Comment O10

The commenter states, "Page #133: Please explain the analysis performed for Main Street/ Riverside Avenue signal. It seems that files and results are not consistent with this location."

Response

The intersection was analyzed in the same manner as the other study area intersections were analyzed (see Section II.B. and Appendix D of the project TIA). The Level of Service calculation worksheets change in layout/appearance because the intersection control changes for "with improvement" conditions. Without further explanation, we are unable to determine what the commenter is referring to in regards to the following sentence: "It seems that files and results are not consistent with this location."

Conclusion

This comment does not identify any deficiencies in the environmental document or identify any significant new information requiring revisions to the IS/MND. No new or substantial increase in the severity of an impact has been identified. Analysis of feasible alternatives or the inclusion of new mitigation measures is not necessary. No changes to the Initial Study and Mitigated Negative Declaration have been made as a result of this comment. No revision to the Initial Study text is necessary, and this comment does not change the significance determination found in the Mitigated Negative Declaration.

Previous California Department of Transportation Comments and Responses

The following represents a comprehensive set of responses to comments provided by the California Department of Transportation (Caltrans) regarding environmental review of the Center Street Commercial Building project. Comments were submitted by Caltrans on February 4, 2015 and July 23, 2015 prior to release of a Notice of Intent to Adopt a Mitigated Negative Declaration (NOI) for the project. Caltrans also submitted comments on August 31, 2016 in response to NOI. The initial set of comments focused on Caltrans requesting preparation of a Traffic Impact Analysis (TIA) despite the project being exempt from full traffic analysis pursuant to both Caltrans and City of Riverside guidelines. Subsequently, a TIA was prepared and submitted to the City in January 2016; therefore, many initial comments submitted by Caltrans have been addressed via preparation of the TIA.

February 4, 2015

This comment indicated that a Traffic Impact Study (TIS) should be prepared in accordance with Caltrans' Guide for the Preparation of Traffic Impact Studies. A Traffic Impact Analysis (TIA) was prepared and included near-term and long-term evaluation of impacts on applicable State transportation facilities, specifically, Interstate 215. This comment was addressed and incorporated into the project Mitigated Negative Declaration (MND) prior to release for public review. The remainder of the comments are information and include recommendations related to preparation of the TIA. The TIA was prepared in accordance with City of Riverside and State specifications, where appropriate; however, a Synchro analysis was not prepared as recommended by Caltrans because of the lack of impacts generated by the project.

July 14, 2016 (Kunzman)

This letter was in response to the February 4, 2015 Caltrans Comment letter and stated that an TIA was not necessary given the proposed project's anticipated trip generation.

July 23, 2016

This comment letter was submitted in rebuttal to responses submitted by the project traffic consultant (Kunzman Associates) indicating that a TIA was not prepared because the project, at the time, did not generate traffic volumes that met Caltrans criteria for preparation of a TIA. Subsequently, a TIA was prepared, as indicated above. The TIA includes analysis of truck trips using Passenger Car Equivalent (PCE) factors as recommended by Caltrans in this letter.

August 31, 2016

This comment letter was submitted in response to the NOI circulated for public review and sent directly to Caltrans with a copy of the IS/MND for the project. The comment letter indicates that Caltrans reiterates its previous comments from the February 4, 2015 and July 23, 2015 letters. Considering the TIA was included with the NOI along with summary discussions and impact determinations included in the IS/MND and that this letter provides no actual comments on the adequacy of the environmental analysis documented in the either the TIA or the Initial Study, no further response is necessary. No new information or new potentially significant impacts are identified in this letter.

Attachments

1. Caltrans Comment Letter – February 4, 2015
2. Kunzman Associates Responses to Comments – July 14, 2015
3. Caltrans Rebuttal to Responses – July 23, 2015
4. Caltrans Comments – August 31, 2016

1. Caltrans Comment Letter – February 4, 2015

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY — EDMUND G. BROWN JR., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 8
PLANNING (MS 722)
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PHONE (909) 383-4557
FAX (909) 383-5936
TTY (909) 383-6300
www.dot.ca.gov/dist8

Serious drought. Help save water!

February 4, 2015

Brain Norton
Associate Planner
City of Riverside
Community Development Department
Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522

Planning Case P14-1033 and P14-1034 (RIV 215 PM 44.93)

Mr. Norton,

We have completed our initial review for the above mentioned proposal for consideration of a design to construct an approximately 308,000 square foot warehouse and a Lot Merger to consolidate four (4) parcels into one parcel totaling approximately 15.90 acres.

As the owner and operator of the State Highway System (SHS), it is our responsibility to coordinate and consult with local jurisdictions when proposed development may impact our facilities. Under the California Environmental Quality Act (CEQA), we are required to make recommendations to offset associated impacts with the proposed project. Although the project is under the jurisdiction of the City of Riverside due to the Project's potential impact to State facilities it is also subject to the policies and regulations that govern the SHS.

We recommend the following to be provided:

Traffic Study

- A Traffic Impact Study (TIS) is necessary to determine this proposed project's near-term and long-term impacts to the State facilities and to propose appropriate mitigation measures. The study should be based on Caltrans' *Guide for the Preparation of Traffic Impact Studies (TIS)* which is located at the following website:
  http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa_files/tisguide.pdf
  Minimum contents of the traffic impact study are listed in Appendix "A" of the TIS guide.

- Traffic Impact further away from the project is typically not required because a project's potential impacts to the SHS dissipate to less than significant levels as traffic disperses throughout the transportation system.

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability."

- The data used in the TIS should not be more than 2 years old.

- The geographic area examined in the traffic study should include as a minimum all regionally significant arterial system segments and intersections, including State highway facilities where the project will add over 100 peak hour trips. State highway facilities that are experiencing noticeable delays should be analyzed in the scope of the traffic study for projects that add 50 to 100 peak hour trips.

- Traffic Analysis Scenarios should clearly be exhibited as exiting, existing + project, existing + project + cumulative, and existing + project + cumulative + ambient growth.

- Caltrans endeavors that any direct and cumulative impacts to the State highway system be eliminated or reduced to a level of insignificance pursuant to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) standards.

- The LOS for operating State highway facilities is based upon Measures of Effectiveness (MOE) identified in the Highway Capacity Manual (HCM). Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities; however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than this target LOS, the existing MOE should be maintained. In general, the region-wide goal for an acceptable LOS on all freeways, roadway segments, and intersections is "D". For undeveloped or not densely developed locations, the goal may be to achieve LOS "C".

- Clearly indicate LOS with and without improvements.

- It is recommended that the Synchro Analysis includes all intersections from the Project site to the proposed study areas. A PHF of 0.92 in urban areas is recommended to be used in the Synchro Analysis.

- All freeway entrance and exit ramps where a proposed project will add a significant number of peak-hour trips that may cause any traffic queues to exceed storage capacities should be analyzed. If ramp metering is to occur, a ramp queue analysis for all nearby Caltrans metered on-ramps is required to identify the delay to motorists using the on-ramps and the storage necessary to accommodate the queuing. The effects of ramp metering should be analyzed in the traffic study. For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

- Proposed improvements should be exhibited in preliminary drawings that indicate the LOS with improvements.

- Please submit a hard copy of all Traffic Impact Analysis documents and an electronic Synchro Analysis file.

We appreciate the opportunity to offer comments concerning this project. If you have any questions regarding this letter, please contact Talvin Dennis at (909) 806-3957 or myself at (909) 383-4557 for assistance.

Sincerely,

MARK ROBERTS
Office Chief
Intergovernmental Review, Community and Regional Planning

2. Kunzman Associates Responses to Comments – July 14, 2015

KUNZMAN ASSOCIATES, INC.

OVER 35 YEARS OF EXCELLENT SERVICE

July 14, 2015

Mr. Chris Brown, Director of Environmental Services
MIG I HOGLE-IRELAND
1500 Iowa Avenue, Suite 110
Riverside, Ca 92507

Dear Mr. Brown:

INTRODUCTION

The firm of Kunzman Associates, Inc. is pleased to provide responses to comments regarding the proposed 6055 Center Street Warehouse Project in the City of Riverside. Comments were received from the California Department of Transportation in a letter dated February 4, 2015 (see Appendix A). The 6055 Center Street Warehouse Project Traffic Exemption Letter was prepared by Kunzman Associates, Inc. (July 8, 2015). The project is proposed to be developed with a 308,000 square foot high-cube warehouse distribution center.

COMMENT 1

A Traffic Impact Study (TIS) is necessary to determine this project's near-term and long-term impacts to the State facilities and to propose appropriate mitigation measures. The study should be based on Caltrans' *Guide for the Preparation of Traffic Impact Studies (TIS)* which is located at the following website: http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_cega_files/tisguide.pdf. Minimum contents of the traffic impact study are listed in Appendix "A" of the TIS guide.

RESPONSE TO COMMENT 1

According to the City of Riverside Public Works Department Traffic Impact Analysis Preparation Guide, December 2014, a traffic impact analysis exemption may exist for the following types of development proposals per approval from the Public Works Department and Planning Division:

1. All Residential Parcel Maps (4 lots or fewer)
2. Single Family Residential Tracts 10 lots or less
3. Apartments and other Multiple Family projects 75 units or less
4. Plot Plan and Use Cases for projects of one acre or less

1111 TOWN & COUNTRY ROAD, SUITE 34
ORANGE, CALIFORNIA 92868
(714) 973-8383

WWW.TRAFFIC-ENGINEER.COM

5. Lodges, Community Centers, Neighborhood Parks and Community Parks

6. Commercial Storage Facilities

7. Congregate Care Facilities that contain significant special services, such as medical facilities, dining facilities, recreation facilities and support retail facilities.

8. Level 1 Project (51-200 peak hour trips) in areas where a current comprehensive traffic analysis exists, infrastructure funding mechanism are in place, or roadway system is built out in accordance with the 2025 General Plan within a 0.25 mile radius of the project. The Public Works Department may, however, require a local/focused traffic impact analysis study for projects that exhibit potential adverse impacts to the circulation system.

9. Any use which can demonstrate, based on the Trip Generation Manual published by the Institute of Traffic Engineers (ITE) or other approved trip generation data, during the peak hours on the roadway, trip generation of less than 50 vehicle trips.

As stated in the Guide for the Preparation of Traffic Impact Studies, California Department of Transportation, December 2002, a traffic impact study may be needed when a project:

1. Generates over 100 peak hour trips assigned to a State highway facility.

2. Generates 50 to 100 peak hour trips assigned to a State highway facility - and, affected State highway facilities are experiencing noticeable delay; approaching unstable traffic flow conditions (Level of Service "C" or "D").

3. Generates 1 to 49 peak hour trips assigned to a State highway facility - the following are examples that may require a full traffic impact study or some lesser analysis:

    a. Affected State highway facilities experiencing significant delay; unstable or forced traffic flow conditions (Level of Service "E" or "F").

    b. The potential risk for a traffic accident is significantly increased (i.e., congestion related collisions, non-standard sight distance considerations, increase in traffic conflict points, etc.).

    c. Change in local circulation networks that impact a State highway facility (i.e., direct access to State highway facility, a non-standard highway geometric design, etc.).

The proposed project is projected to generate approximately 679 daily vehicle trips in passenger car equivalents, 43 passenger car equivalents of which will occur during the morning peak hour and 51 passenger car equivalents of which will occur during the evening peak hour.
The proposed project meets the City of Riverside traffic impact analysis exemption criteria (number 9), as the proposed project is projected to generate less than 50 peak hour trips (converted to passenger

car equivalents) during both the morning peak hour and the evening peak hour on Center Street both west and east of the project site.

The proposed project is not anticipated to generate 50 or more peak hour trips to a State highway facility.

As such, the 6055 Center Street Warehouse Project Traffic Exemption Letter was prepared by Kunzman Associates, Inc. (July 8, 2015) at the request of the City of Riverside Transportation Department staff.

COMMENT 2

Traffic Impact further away from the project is typically not required because a project's potential impacts to the SHS dissipate to less than significant levels as traffic disperse throughout the transportation system.

RESPONSE TO COMMENT 2

Comment so noted.

COMMENT 3

The data used in the TIS should not be more than 2 years old.

RESPONSE TO COMMENT 3

Comment so noted.

COMMENT 4

The geographic area examined in the traffic study should include as a minimum all regionally significant arterial system segments and intersections, including State highway facilities where the project will add over 100 peak hour trips. State highway facilities that are experiencing noticeable delays should be analyzed in the scope of the traffic study for projects that add 50 to 100 peak hour trips.

RESPONSE TO COMMENT 4

See response to comment 1.

COMMENT 5

Traffic Analysis Scenarios should clearly be exhibited as existing, existing + project, existing + project + cumulative, and existing + project + cumulative + ambient growth.

RESPONSE TO COMMENT 5

See response to comment 1.

COMMENT 6

Caltrans endeavors that any direct and cumulative impacts to the State highway system be eliminated or reduced to a level of insignificance pursuant to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) standards.

RESPONSE TO COMMENT 6

Comment is so noted.

COMMENT 7

The LOS for operating State highway facilities is based upon Measures of Effectiveness (MOE) identified in the Highway Capacity Manual (HCM). Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities; however, Caltrans acknowledges that his may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. If an existing State highway facility is operating at less than this target LOS, the existing MOE should be maintained. In general, the region-wide goal for an acceptable LOS on all freeways, roadway segments, and intersections is "D". For undeveloped or not densely developed locations, the goal may be to achieve LOS "C".

RESPONSE TO COMMENT 7

Comment is so noted.

COMMENT 8

Clearly indicate LOS with and without improvements.

RESPONSE TO COMMENT 8

See response to comment 1.

COMMENT 9

It is recommended that a Synchro Analysis includes all intersections from the Project site to the proposed study areas. A PHF of 0.92 in urban areas is recommended to be used in the SYNCHRO Analysis.

Mr. Chris Brown, Director of Environmental Services
MIG I HOGLE-IRELAND
July 14, 2015

RESPONSE TO COMMENT 9

See response to comment 1.

COMMENT 10

All freeway entrance and exit ramps where a proposed project will add a significant number of peak-hour trips that may cause any traffic queues to exceed storage capacities should be analyzed. If ramp metering is to occur, a ramp queue analysis for all nearby Caltrans metered on-ramps is required to identify the delay to motorists using the on-ramps and the storage necessary to accommodate the queuing. the effects of ramp metering should be analyzed in the traffic study. For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.

RESPONSE TO COMMENT 10

See response to comment 1.

COMMENT 11

Proposed improvements should be exhibited in preliminary drawings that indicate the LOS with improvements.

RESPONSE TO COMMENT 11

See response to comment 1.

It was a pleasure to service your needs on this project. Should you have any questions or if we can be of further assistance, please do not hesitate to call at (714) 973-8383.

Sincerely,

KUNZMAN ASSOCIATES, INC.

Bryan Crawford
Senior Associate

#6055rtc

KUNZMAN ASSOCIATES, INC.

William Kunzman

William Kunzman, P.E.
Principal

3. Caltrans Rebuttal to Responses – July 23, 2015

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr. Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 8
PLANNING (MS 722)
464 WEST 4th STREET, 6th Floor
SAN BERNARDINO, CA 92401-1400
PHONE (909) 383-4557
FAX (909) 383-5936
TTY (909) 383-6300
www.dot.ca.gov/dist8

Serious drought
Help save water!

July 23, 2015

Brain Norton
Associate Planner
City of Riverside
Community Development Department
Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522

Planning Case P14-1033 and P14-1034 (RIV 215 PM 44.93)

Mr. Norton,

We have received and reviewed your comment letter for the above mentioned proposal for consideration of a design to construct an approximately 308,000 square foot warehouse and a Lot Merger to consolidate four (4) parcels into one parcel totaling approximately 15.90 acres.

Although the City of Riverside Public Works Department may issues exemption to certain projects that met the City criteria to avoid preparing of a Traffic Impact Analysis (TIA) Report. A TIA will be necessary for further and future study of traffic impact to the State Highway System (SHS).

The proposed 308,000 square foot High-Cube warehouse and distribution center will create an impact to the SHS. In your comment response letter, Response to Comment 1 bottom of page 2, "The proposed project is projected to generate approximately 679 daily vehicle trips in passenger cars equivalents, 43 passenger car equivalents of which will occur during the morning peak hour and 51 passenger car equivalents of which will occur in the evening hour".

In response to your comments it is vital that the Department of Transportation still would need to understand what you are basing your number count assumption of 679 daily trips on. Your 43 passenger car equivalents PCE that occur in the AM hour along with your count of 51 PCE occurring in the PM hours do not equate to the 679 daily trips you listed.

Please provide a more detailed description of the warehouse and distribution center, also the number of daily Truck Trips. The shipping of merchandise to and from your facility needs to be calculated in order to establish a more accurate study. The PCE for larger trucks calculate as follows:

- 1.5 cars for 2 axle trucks.
- 2.0 cars for 3 axle trucks.
- 3.0 cars for 4 or more axle trucks.

As the owner and operator of the State Highway System (SHS), it is our responsibility to coordinate and consult with local jurisdictions when proposed development may impact our facilities. Under the California Environmental Quality Act (CEQA), we are required to make recommendations to offset associated impacts with the proposed project. Although the project is under the jurisdiction of the City of Riverside due to the Project's potential impact to State facilities it is also subject to the policies and regulations that govern the SHS.

We appreciate the opportunity to offer comments concerning this project. If you have any questions regarding this letter, please contact Talvin Dennis at (909) 806-3957 or myself at (909) 383-4557 for assistance.

Sincerely,

Original signed by Mark Roberts

MARK ROBERTS
Office Chief
Intergovernmental Review, Community and Regional Planning

4. Caltrans Comments – August 31, 2016

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN JR., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 8
PLANNING (MS 722)
464 WEST 4th STREET, 6th Floor
SAN BERNARDINO, CA 92401-1400
PHONE (909) 383-4557
FAX (909) 383-5936
TTY (909) 383-6300
www.dot.ca.gov/dist8

RECEIVED
SEP 2 2016
Community & Economic Development Department

Serious drought. Help save water!

August 31, 2016

Brain Norton
Senior Planner
City of Riverside
Community Development Department
Planning Division
3900 Main Street, 3rd Floor
Riverside, CA 92522

Planning Case P14-1033 and P14-1034 (RIV 215 PM 44.93)

Mr. Norton,

We have received and reviewed your comment letter dated August 24, 2016 for the above mentioned proposal for consideration of a design to construct an approximately 308,000 square foot warehouse and a Lot Merger to consolidate four (4) parcels into one parcel totaling approximately 15.90 acres.

As the owner and operator of the State Highway System (SHS), it is our responsibility to coordinate and consult with local jurisdictions when proposed development may impact our facilities. Under the California Environmental Quality Act (CEQA), we are required to make recommendations to offset associated impacts with the proposed project. Although the project is under the jurisdiction of the City of Riverside due to the Project's potential impact to State facilities it is also subject to the policies and regulations that govern the SHS.

As per our letters dated July 23, 2016 and February 4, 2015 we ask that you please review said letters for our comments. A copy of both letters are enclosed for your reference. The Department of Transportation stands behind our pervious concerns.

We appreciate the opportunity to offer comments concerning this project. If you have any questions regarding this letter, please contact Talvin Dennis at (909) 806-3957 or myself at (909) 383-4557 for assistance.

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Sincerely,

Richard A. Deanin

for MARK ROBERTS
Office Chief
Intergovernmental Review, Community and Regional Planning

Attachment A:
Air Quality/ Climate Change Assessment: Unrefrigerated Warehouse Use

Center Street Commerce Building

Air Quality & Climate Change Assessment

June 2015 (13432)

Prepared for:

Transition Properties, LP
PO Box 1010
Blue Jay, California 92317

Prepared by:

MIG | Hogle-Ireland
1500 Iowa Avenue, Suite 110
Riverside, California 92507

Center Street Commerce Building
Air Quality & Climate Change Assessment

June 2015

City of Riverside

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Appendices

1 Executive Summary

Construction-related and operational emissions of criteria pollutants were modeled and analyzed for the proposed Center Street Commerce Building project. The building is located south of Center Street and north of Placentia Lane in the City of Riverside. This report also analyzes the project's consistency with the South Coast Air Quality Management District (SCAQMD) 2012 Air Quality Management Plan (AQMP) for the South Coast Air Basin. Cumulative impacts were analyzed using the methodology provided by the 1993 SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook. Please note that a Health Risk Assessment (HRA) was prepared for this project under separate cover.

Additionally, this report models and analyzes construction- and operation-related emissions of greenhouse gases from the proposed project. This analysis utilizes guidance provided in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper and the *Quantifying Greenhouse Gas Mitigation Measures* handbook. Modeling of emissions utilizes the California Emissions Estimator Model (CalEEMod) v 2013.2.2.

1.1 Project Description

The project includes the construction of a 308,000-square-foot building on 15.63 acres located south of Center Street and north of Placentia Lane in the City of Riverside, California. The building includes 110,591 square feet of landscaping, the potential for up to 282 parking stalls, and 47 loading docks. The project includes use of low-VOC coatings on interiors and exterior surface of 37 grams per liter or less.

1.2 Air Quality

The project will not result in substantial emissions of oxides of nitrogen, volatile organic compounds (with mitigation incorporated), or particulate matter and would not exceed the regional growth assumptions used in the Air Quality Management Plan (AQMP). The project will not individually cause or cumulatively contribute to an air quality standard violation. Emissions of carbon monoxide and localized construction emissions will not substantially impact sensitive receptors in vicinity of the project. The project will not emit substantial amounts of diesel particulate matter due to the operation of heavy-duty trucks on the project site. The project will not expose a substantial number of people to odors.

1.3 Climate Change

Greenhouse gas emissions will not exceed the annual 10,000 metric ton carbon dioxide equivalent threshold established by the South Coast Air Quality Management District and will not conflict with state greenhouse gas emissions strategies.

2 Introduction

This report models and analyzes construction- and operation-related emissions of criteria air pollutants and greenhouse gas emissions from the proposed Center Street Commerce Building project totaling 308,000 square feet on 15.63 acres located in City of Riverside, California.

The air quality analysis provided herein utilizes guidance provided in the South Coast Air Quality Management District (SCAQMD) the 1993 California Environmental Quality Act (CEQA) Air Quality handbook as amended and supplemented (http://www.aqmd.gov/ceqa/hdbk.html). Please note that analysis of toxic air contaminants (TAC) is provided under separate cover. Pollutant emissions were modeled by utilizing the following:

- California Emissions Estimator Model (CalEEMod) v 2013.2.2
- EMFAC2014

The climate change analysis provided herein utilizes guidance provided in the California Air Pollution Control Officers Association (CAPCOA) *CEQA and Climate Change* white paper and the *Quantifying Greenhouse Gas Mitigation Measures* handbook. Modeling of greenhouse gas emissions utilizes the California Emissions Estimator Model (CalEEMod) v 2013.2.2.

This report has been prepared utilizing project-specific characteristics where available. In those instances where project-specific data is not available, the analysis has been supplemented by model defaults or other standardized sources of comparable data. In any case where non-project defaults or other data have been used, a " worst-case" scenario was developed to ensure a conservative estimate of emissions.

This report has been prepared for use by the Lead Agency to assess potential project-related air quality impacts in compliance with the State CEQA Statutes and Guidelines, particularly in respect to the air quality issues identified in Appendix G of the State CEQA Guidelines. This report does not make determinations of significance pursuant to CEQA because such determinations are required to be made solely in the purview of the Lead Agency.

This document has been reviewed in accordance with the *Table 7-2, Checklist for an Air Quality Analysis Section* of the SCAQMD Air Quality Handbook for quality control purposes.

This report was prepared by Christopher Brown (Director of Environmental Services) of MIG | Hogle-Ireland under contract by Transitions Properties, LP.

Christopher Brown
Director of Environmental Services

3.1 Climate

The project is located in the City of Riverside. The City of Riverside and the broader Inland Empire are defined by a semi-arid, Mediterranean climate with mild winters and warm summers. Annual rainfall averages 9.86 inches with the rainy season occurring during the winter.[1] The coolest month of the year is December with an average monthly low of 41.3° Fahrenheit (F). The warmest month is August with an average monthly high of 94.4° F. Riverside is located at an elevation of approximately 700 feet to 1,400 feet above mean sea level (AMSL).[2] The project site is located at an approximate elevation of 830 AMSL. Wind generally blows from the west.[3]

3.2 Regional Air Quality

The proposed project is located within the South Coast Air Basin (Basin).[4] The basin includes Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside Counties. The San Gabriel, San Bernardino, and San Jacinto Mountains bound the Basin to the north and east that trap ambient air and pollutants within the Los Angeles and Inland Empire valleys below. The South Coast Air Quality Management District (SCAQMD) manages the Basin. Pursuant to the California Clean Air Act (CCAA), SCAQMD is responsible for bringing air quality within the Basin into conformity with federal and State air quality standards by reducing existing emission levels and ensuring that future emission levels meet applicable air quality standards. SCAQMD works with federal, State, and local agencies to reduce pollutant sources through the development of rules and regulations.

Both California and the federal government have established health-based ambient air quality standards (AAQS) for seven air pollutants (known as *criteria pollutants*). These pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), inhalable particulate matter with a diameter of 10 microns or less (PM_{10}), fine particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$), and lead (Pb). The State has also established AAQS for the additional pollutants of visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. The AAQS are designed to protect the health and welfare of the populace within a reasonable margin of safety. Where the State and federal standards differ, State AAQS are more stringent than federal AAQS. Federal and State standards are shown in Table 1 (Ambient Air Quality Standards). A brief description of each criteria pollutant is provided below.

Ozone. Ozone is a pungent, colorless, and highly reactive gas that forms from the atmospheric reaction of organic gases with nitrogen oxides in the presence of sunlight. Ozone is most commonly associated with smog. Ozone precursors such as reactive organic gases (ROG) and oxides of nitrogen (NO_X) are released from mobile and stationary sources. Ozone is a respiratory irritant and can cause cardiovascular diseases, eye irritation, and impaired cardiopulmonary function. Ozone can also damage building materials and plant leafs.

Carbon Monoxide. Carbon monoxide is primarily emitted from vehicles due to the incomplete combustion of fuels. Carbon monoxide has wide ranging impacts on human health because it combines with hemoglobin in the body and reduces the amount of oxygen transported in the bloodstream. Carbon monoxide can result in reduced tolerance for exercise, impairment of mental function, impairment of fetal development, headaches, nausea, and death at high levels of exposure.

Nitrogen Dioxide. Nitrogen dioxide and other oxides of nitrogen (NO_X) contribute to the formation of smog and results in the brownish haze associated with it. They are primarily emitted from motor vehicle exhaust but can be omitted from other high-temperature stationary sources. Nitrogen oxides can aggravate respiratory illnesses, reduce visibility, impair plant growth, and form acid rain.

Particulate Matter. Particulate matter is a complex mixture of small-suspended particles and liquid droplets in the air. Particulate matter between ten microns and 2.5 microns is known as PM_{10}, also known as coarse or inhalable particulate matter. PM_{10} is emitted from diverse sources including road dust, diesel soot, combustion products, abrasion of tires and brakes, construction operations, and windstorms. PM_{10} can also be formed secondarily in the atmosphere when NO_2 and SO_2

react with ammonia. Particulate matter less than 2.5 microns in size are called $PM_{2.5}$ or fine particulate matter. $PM_{2.5}$ is primarily emitted from point sources such as power plants, industrial facilities, automobiles, wood-burning fireplaces, and construction sites. Particulate matter is deposited in the lungs and cause permanent lung damage, potentially resulting in lung disease and respiratory symptoms like asthma and bronchitis. Particulate matter has also been linked to cardiovascular problems such as arrhythmia and heart attacks. Particulate matter can also interfere with the body's ability to clear the respiratory tract and can act as a carrier of absorbed toxic substances. Particulate matter causes welfare issues because it scatters light and reduces visibility, causes environmental damage such as increasing the acidity of lakes and streams, and can stain and damage stone, such as that applied in statues and monuments.

Sulfur Dioxide. Sulfur dioxide and other oxides of sulfur (SO_X) are reactive gases emitted from the burning of fossil fuels, primarily from power plants and other industrial facilities.[5] Other less impacting sources include metal extraction activities, locomotives, large ships, and off-road equipment. Human health impacts associated with SO_X emissions include bronchoconstriction and increased asthma symptoms.

Lead. Lead is primarily emitted from metal processing facilities (i.e. secondary lead smelters) and other sources such as manufacturers of batteries, paints, ink, ceramics, and ammunition. Historically, automobiles were the primary sources before lead was phased out of gasoline. The health effects of exposure to lead include gastrointestinal disturbances, anemia, kidney diseases, and potential neuromuscular and neurologic dysfunction. Lead is also classified as a probable human carcinogen.

Table 1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM_{10})[8]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		-		
Fine Particulate Matter($PM_{2.5}$)[8]	24 Hour	-	-	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/ m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	-	Non-Dispersive Infrared Photometry (NDIR) -
	8 Hour	9.0 ppm (10mg/m^3)		9 ppm (10 mg/m^3)	-	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/ m^3)		-	-	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.03 ppm (57 µg/m^3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m^3)		100 ppb (188 µg/m^3)	-	
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	-	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method) -
	3 Hour	-		-	0.5 ppm (1,300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[10]	-	
	Annual Arithmetic Mean	-		0.030 ppm (for certain areas)[10]	-	
Lead[11,12]	30 Day Average	1.5 µg/m^3	Atomic Absorption	-	-	High Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average[10]	-		0.15 µg/m^3		
Visibility Reducing Particles[13]	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No Federal Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[11]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: ARB, June 2013

PPM, parts per million
µg/m3, micrograms per cubic meter

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
8. On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m^3 to 12.0 µg/m^3. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m^3, as was the annual secondary standard of 15 µg/m^3. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
9. To attain the 1-hour national standard, the 3-year average of the 98th percentile of the daily maximum 1-hour daily maximum concentrations at each site must not exceed 100ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national standards to the California standards the units can be converted from ppb to ppm. In this case, the national standards of 100ppb is identical to 0.100ppm.
10. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
11. The ARB has identified lead and vinyl chloride as "toxic air contaminants" with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
11. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
12. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

3.3 Non-Attainment Status

Air pollution levels are measured at monitoring stations located throughout the Basin. Areas that are in nonattainment with respect to criteria pollutants are required to prepare plans and implement measures that will bring the region into attainment. Table 2 (South Coast Air Basin Attainment Status) summarizes the attainment status in the Basin for the criteria pollutants. The Basin is currently in nonattainment status for ozone and inhalable and fine particulate matter.

Pollution problems in the Basin are caused by emissions within the area and the specific meteorology that promotes pollutant concentrations. Emissions sources vary widely from smaller sources such as individual residential water heaters and short-term grading activities to extensive operational sources including long-term operation of electrical power plants and other intense industrial use. Pollutants in the Basin are blown inward from coastal areas by sea breezes from the Pacific Ocean and are prevented from horizontally dispersing due to the surrounding mountains. This is further complicated by atmospheric temperature inversions that create inversion layers. The inversion layer in Southern California refers to the warm layer of air that lies over the cooler air from the Pacific Ocean. This is strongest in the summer and prevents ozone and other pollutants from dispersing upward. A ground-level surface inversion commonly occurs during winter nights and traps carbon monoxide emitted during the morning rush hour.

Table 2
South Coast Air Basin Attainment Status

Pollutant	Federal	State
O_3 (1-hr)	--	Nonattainment
O_3 (8-hr)	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO_2	Attainment	Nonattainment
SO_2	Attainment	Attainment
Pb	Nonattainment	Nonattainment
VRP	--	Unclassified
SO_4	--	Attainment
H_2S	--	Unclassified
Sources: ARB 2014		

3.4 Local Air Quality

The City of Riverside is located within the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The project site is located in Area 23. Air quality in Area 23 is monitored in Riverside. Air monitoring results for station 4144 over the last three years of available data is summarized in Table 3 (2011-2013 Local Air Quality).[6] [7] [8] Table 4 (2011-2013 Air Quality Standards Exceedance) summarizes the number of days for each monitoring year that air quality standards were exceeded. Based on the 2011-2013 air quality monitoring data, ozone pollution did not exceed the State-8-hour standard or the Federal 8-hour standard in 2013. the Metropolitan Riverside County area experiences ozone pollution and has exceeded the State 8-hr maximum concentration for 70 days in 2012 and 92 days in 2011. This is not necessarily due to local production of ozone, but due to how ozone forms and travels over the Basin. Ozone precursors are emitted primarily in the urban centers of the Basin such as Los Angeles. Ozone does not form immediately but rather forms over the day. This combined with prevailing winds blowing ozone precursors inland cause the highest concentrations of ozone in the Basin to occur in Riverside County and mountain regions. The County also experiences particulate matter pollution, with approximately 19 percent of PM_{10} samples in year 2012 exceeding the State standard.

Table 3
2011-2013 Local Air Quality

Monitoring Station	CO		O_3 (PPM)		NO_2 (PPB)		PM_{10} (µg/m³)		$PM_{2.5}$ (µg/m³)		TSP (µg/m³)		Pb (µg/m³)		SO_4 (µg/m³)
	Max 1-hr	Max 8-hr	Max 1-hr	Max 8-hr	Max 1-hr	AAM	Max 24-hr	AAM	Max 24-hr	AAM	Max 24-hr	AAM	Max Month	Max Qtr	Max 24-hr
Metropolitan Riverside County 2															
2013	--	1.6	--	--	57.6	15.8	--	--	53.7	11.28	--	--	0.007	0.006	--
2012	--	1.6	0.126	0.102	61.7	15.5	67	34.5	38.1	13.51	126	65.7	0.008	0.006	7.7
2011	--	1.4	0.128	0.115	63.3	16.6	82	33.7	60.8	13.6	107	62.7	0.007	0.007	5.1

Source: SCAQMD 2011-2013
* specific station data is not provided by SCAQMD; however, all stations are noted as not exceeding the 20 PPM state 1-hour standard
-- pollutant not monitored
PPM, parts per million
µg/m3, micrograms per cubic meter
AAM, annual arithmetic mean

Table 4
2011-2013 Air Quality Standards Exceedance

Monitoring Station	O_3 (PPM)			PM_{10} (µg/m³)		$PM_{2.5}$ (µg/m³)
	Fed* 8-hr	State 1-hr	State 8-hr	Fed 24-hr	State 24-hr	Fed^ 24-hr
Metropolitan Riverside County 2						
2013	--	--	--	--	--	1
2012	47	27	70	0	19	7
2011	67	52	92	0	14	4

Source: SCAQMD 2011-2013
-- pollutant not monitored
* 0.075 ppm
^35 µg/m3

3.5 Sensitive Receptors

Some populations are more susceptible to the effects of air pollution than the population at large; these populations are defined as sensitive receptors. Sensitive receptors include children, the elderly, the sick, and the athletic. Land uses associated with sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. Sensitive receptors are located north, east, and south of the project. The Ab Brown Sports Complex Park is located directly south of the project site. Residential uses are located north and west of the project site. Exhibit 2 (Radius Map) identifies existing development in the project vicinity based on recent assessor's parcel data.

3.6 Local Transportation

The proposed project is located south of Center Street and north of Placentia Lane. Both roadways are two-lane, undivided roadways.

3.7 Odors

According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). The proposed project does not produce odors that could affect a substantial number of people.

3.8 Climate Change

3.8.1 Defining Climate Change

Climate change is the distinct change in measures of climate for a long period of time. Climate change can result from natural processes and from human activities. Natural changes in the climate can be caused by indirect processes such as changes in the Earth's orbit around the Sun or direct changes within the climate system itself (i.e. changes in ocean circulation). Human activities can affect the atmosphere through emissions of gases and changes to the planet's surface. Emissions affect the atmosphere directly by changing its chemical composition, while changes to the land surface indirectly affects the atmosphere by changing the way the Earth absorbs gases from the atmosphere. The term "climate change" is preferred over the term "global warming" because "climate change" conveys the fact that other changes can occur beyond just average increase in temperatures near the Earth's surface. Elements that indicate that climate change is occurring on Earth include:

- Rising of global surface temperatures by 1.3° Fahrenheit (F) over the last 100 years
- Changes in precipitation patterns
- Melting ice in the Arctic
- Melting glaciers throughout the world
- Rising ocean temperatures
- Acidification of oceans
- Range shifts in plant and animal species

Climate change is intimately tied to the Earth's greenhouse effect. The greenhouse effect is a natural occurrence that helps regulate the temperature of the planet. The majority of radiation from the Sun hits the Earth's surface and warms it. The surface in turn radiates heat back towards the atmosphere, known as infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping back into space and re-radiate it in all directions. This process is essential to supporting life on Earth because it keeps the planet approximately 60° F warmer than without it. Emissions from human activities since the beginning of the industrial revolution (approximately 150 years) are adding to the natural greenhouse effect by increasing the gases in the atmosphere that trap heat, thereby contributing to an average increase in the Earth's temperature. Human activities that enhance the greenhouse effect are detailed below.

Greenhouse Gases

The greenhouse effect is caused by a variety of "greenhouse gases". Greenhouse gases (GHGs) occur naturally and from human activities. Greenhouse gases produced by human activities include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Since the year 1750, it is estimated that the concentrations of carbon dioxide, methane, and nitrous oxide in the atmosphere have increased over 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity. The primary GHGs are discussed below.[9]

Carbon Dioxide. CO_2 is emitted and removed from the atmosphere naturally. Animal and plant respiration involves the release of carbon dioxide from animals and its absorption by plants in a continuous cycle. The ocean-atmosphere exchange results in the absorption and release of CO_2 at the sea surface. Carbon dioxide is also released from plants during wildfires. Volcanic eruptions release a small amount of CO_2 from the Earth's crust.

Human activities that affect carbon dioxide in the atmosphere include burning of fossil fuels, industrial processes, and product uses. Combustion of fossil fuels is the largest source of carbon dioxide emissions in the United States, accounting for approximately 85 percent of all equivalent emissions. Because of the fossil fuels used, the largest of these sources is electricity generation and transportation. When fossil fuels are burned, the carbon stored in them is released into the atmosphere entirely as CO_2. Emissions from on site industrial activities also emit carbon dioxide such as cement, metal, and chemical production and use of petroleum produced in plastics, solvents, and lubricants.

Methane. Methane (CH_4) is emitted from human activities and natural sources. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, soils, and wildfires. Human activities that cause methane releases include fossil fuel production, animal digestive processes from farms, manure management, and waste management. It is estimated that 50 percent of global methane emissions are human generated. Wetlands are the primary natural producers of methane in the world because the habitat is conducive to bacteria that produce methane during decomposition of organic material. Methane is produced from landfills as solid waste decomposes. Methane is a primary component of natural gas and is emitted during its production, processing, storage, transmission, distribution, and use. Decomposition of organic material in manure stocks or in liquid manure management systems also releases methane. Releases from animal digestive processes are the primary source of human-related methane.

Nitrous Oxide. Anthropogenic (human) sources of nitrous oxide include agricultural soil management, animal manure management, sewage treatment, combustion of fossil fuels, and production of certain acids. N_2O is produced naturally in soil and water, especially in wet, tropical forests. The primary human-related source of N_2O is agricultural soil management due to use of synthetic nitrogen fertilizers and other techniques to boost nitrogen in soils. Combustion of fossil fuels (mobile and stationary) is the second leading source of nitrous oxide, although parts of the world where catalytic converters are used (such as California) have significantly lower levels than those areas that do not.

High Global Warming Potential Gases. High global warming potential (GWP) gases (or fluorinated gases) are entirely manmade and are mainly used in industrial processes. HFCs, PFCs, and SF_6 are high GWP gases. These types of gases are used in aluminum production, semiconductor manufacturing, electric power transmission, magnesium production and processing, and in the production of hydrochlorofuorocarbon-22 (HCFC-22). High GWP gases are also used as substitutes for ozone-depleting gases like chlorofluorocarbons (CFCs) and halons. Use of high GWP gases as substitutes for ozone-depleting substances is the primary use of these gases in the United States.

Water Vapor. It should be noted that water vapor is also a significant GHG in the atmosphere; however, concentration of water vapor in the air is primarily dependent on air temperature and cannot be influenced by humans.

GHGs behave differently in the atmosphere and contribute to climate change in different ways. Some gases have more potential to reflect infrared heat back towards the earth while some persist in the atmosphere longer than others. To equalize the contribution of GHGs to climate change, the Intergovernmental Panel on Climate Change (IPCC) devised a weighted metric to compare all greenhouse gases to carbon dioxide.[10] The weighting depends on the lifetime of the gas in the

atmosphere and its radiative efficiency. As an example, over a time horizon of 100-years, emissions of nitrous oxide will contribute to climate change 298 times more than the same amount of emissions of carbon dioxide while emissions of HFC-23 would contribute 14,800 times more than the same amount of carbon dioxide. These differences define a gas's GWP. Table 5 (Global Warming Potential of Greenhouse Gases) identifies the lifetime and GWP of select GHGs. The lifetime of the GHG represents how many years the GHG will persist in the atmosphere. The GWP of the GHG represents the GHG's relative potential to induce climate change as compared to carbon dioxide.

Carbon Sequestration

Carbon sequestration is the process by which plants absorb CO_2 from the atmosphere and store it in biomass like leaves and grasses. Agricultural lands, forests, and grasslands can all sequester carbon dioxide, or emit it. The key is to determine if the land use is emitting carbon dioxide faster than it is absorbing it. Young, fast-growing trees are particularly good at absorbing more than they release and are known as a *sink*. Agricultural resources often end up being sources of carbon release because of soil management practices. Deforestation contributes to carbon dioxide emissions by removing trees, or carbon sinks, that would otherwise absorb CO_2. Forests are a crucial part of sequestration in some parts of the world, but not much in the United States. Another form of sequestration is geologic sequestration. This is a manmade process that results in the collection and transport of CO_2 from industrial emitters (i.e. power plants) and injecting it into underground reservoirs.

Table 5
Global Warming Potential (GWP) of Greenhouse Gases (GHG)

GHG	Lifetime (yrs)	GWP
Carbon Dioxide	50-200	1
Methane	12	25
Nitrous Oxide	114	298
HFC-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC-14	50,000	7,390
PFC-116	10,000	12,200
Sulfur Hexafluoride	3,200	22,800
Source: IPCC 2007		

3.8.2 Climate Change and California

Specific, anticipated impacts to California have been identified in the 2009 California Climate Adaptation Strategy prepared by the California Natural Resources Agency (CNRA) through extensive modeling efforts.[11] General climate changes in California indicate that:

- California is likely to get hotter and drier as climate change occurs with a reduction in winter snow, particularly in the Sierra Nevadas
- Some reduction in precipitation is likely by the middle of the century
- Sea-levels will rise up to an estimated 55 inches
- Extreme events such as heat waves, wildfires, droughts, and floods will increase
- Ecological shifts of habitat and animals are already occurring and will continue to occur

It should be noted that changes are based on the results of several models prepared under different climatic scenarios; therefore, discrepancies occur between the projections. The potential impacts of global climate change in California are detailed below.

Public Health and Welfare

Concerns related to public health and climate change includes higher rates of mortality and morbidity, change in prevalence and spread of disease vectors, decreases in food quality and security, reduced water availability, and increased exposure to pesticides. These concerns are all generally related to increase in ambient outdoor air temperature, particularly in summer.

Higher rates of mortality and morbidity could arise from more frequent heat waves at greater intensities. Health impacts associated with extreme heat events include heat stroke, heat exhaustion, and exacerbation of medical conditions such as cardiovascular and respiratory diseases, diabetes, nervous system disorders, emphysema, and epilepsy. Climate change would result in degradation of air quality promoting the formation of ground-level pollutants, particularly ozone. Degradation of air quality would increase the severity of health impacts from criteria and other air pollutants discussed in Section 4.3 (Air Quality). Temperature increases and increases in carbon dioxide are also expected to increase plant production of pollens, spores, and fungus. Pollens and spores could induce or aggravate allergic rhinitis, asthma, and obstructive pulmonary diseases.

Precipitation projections suggest that California will become drier over the next century due to reduced precipitation and increased evaporation from higher temperatures. These conditions could result in increased occurrences of drought. Surface water reductions will increase the need to pump groundwater, reducing supplies and increasing the potential for land subsidence.

Precipitation changes are also suspected to impact the Sierra snowpack (see "Water Management" herein). Earlier snow melts could coincide with the rainy season and could result in failure of the flood control devices in that region. Flooding can cause property damage and loss of life for those affected. Increased wildfires are also of concern as the State "dries" over time. Wildfires can also cause property damage, loss of life, and injuries to citizens and emergency response services.

Sea-level rises would also threaten human health and welfare. Flood risks will be increased in coastal areas due to strengthened storm surges and greater tidal damage that could result in injury and loss of property and life. Gradual rising of the sea will permanently inundate many coastal areas in the state.

Other concerns related to public health are changes in the range, incidence, and spread of infectious, water-borne, and food-borne diseases. Changes in humidity levels, distribution of surface water, and precipitation changes are all likely to shift or increase the preferred range of disease vectors (i.e. mosquitoes). This could expose more people and animals to potential for vector-borne disease.

Biodiversity and Habitat

Changes in temperature will change the livable ranges of plants and animals throughout the state and cause considerable stress on these species. Species will shift their range if appropriate habitat is available and accessible if they cannot adapt to their new climate. If they do not adapt or shift, they face local extirpation or extinction. As the climate changes, community compositions and interactions will be interrupted and changed. These have substantial implications on the ecosystems in the state. Extreme events will lead to tremendous stress and displacement on affected species. This could make it easier for invasive species to enter new areas, due to their ability to more easily adapt. Precipitation changes would alter stream flow patterns and affect fish populations during their life cycle. Sea level rises could impact fragile wetland and other coastal habitat.

Water Management

Although disagreement among scientists on long-term precipitation patterns in the State has occurred, it is generally accepted by scientists that rising temperatures will impact California's water supply due to changes in the Sierra Nevada snowpack. Currently, the State's water infrastructure is designed to both gather and convey water from melting snow and to serve as a flood control device. Snowpack melts gradually through spring warming into early summer, releasing an average of approximately 15 million acre-feet of water. The State's concern related to climate change is that due to rising temperatures,

snowpack melt will begin earlier in the spring and will coincide with the rainy season. The combination of precipitation and snowmelt would overwhelm the current system, requiring tradeoffs between water storage and flood protection to be made. Reduction in reserves from the Sierra Nevada snowpack is troublesome for California and particularly for Southern California. Approximately 75-percent of California's available water supply originates in the northern third of the state while 80 percent of demand occurs in the southern two-thirds. There is also concern is that rising temperatures will result in decreasing volumes from the Colorado River basin. Colorado River water is important to Southern California because it supplies water directly to Metropolitan Water District of Southern California. Water from the Colorado River is also used to recharge groundwater basins in the Coachella Valley.

Agriculture

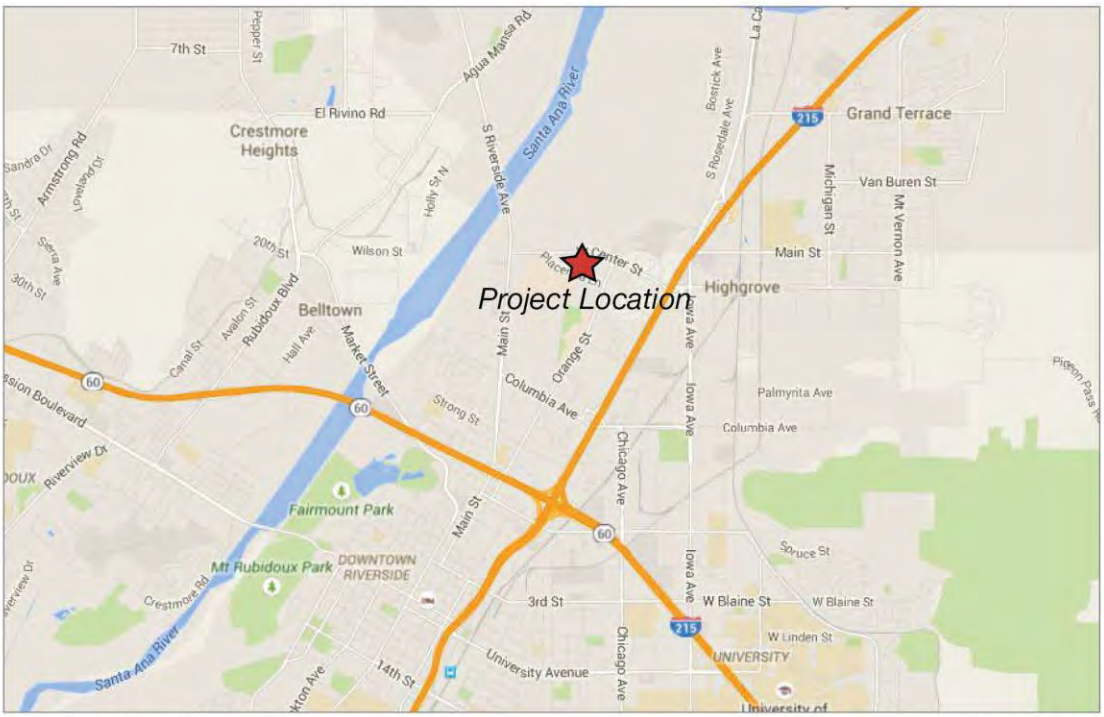
California is the most agriculturally productive state in the US resulting in more than 37 billion dollars in revenue in 2008. California is the nation's leading producer of nearly 80 crops and livestock commodities, supplying more than half of the nation's fruit and vegetables and over 90 percent of the nation's production of almonds, apricots, raisin grapes, olives, pistachios, and walnuts. Production of crops is not limited to the Central Valley but also occurs in Southern California. Strawberries and grapes are grown in San Bernardino and Riverside Counties. Orange County and San Diego County also contribute to strawberry production. Cherries are also grown in Los Angeles and Riverside County. Anticipated impacts to agricultural resources are mixed when compared to the potentially increased temperatures, reduced chill hours, and changes in precipitation associated with climate change. For example, wheat, cotton, maize, sunflower, and rice are anticipated to show declining yields as temperatures rise. Conversely, grapes and almonds would benefit from warming temperatures. Anticipated increases in the number and severity in heat waves would have a negative impact on livestock where heat stress would make livestock more vulnerable to disease, infection and mortality. The projected drying trend and changes in precipitation are a threat to agricultural production in California. Reduced water reliability and changes in weather patterns would impact irrigated farmlands and reduce food security. Furthermore, a drying trend would increase wildfire risk. Overall, agriculture in California is anticipated to suffer due to climate change impacts.

Forestry

Increases in wildfires will substantially impact California's forest resources that are prime targets for wildfires. This can increase public safety risks, property damage, emergency response costs, watershed quality, and habitat fragmentation. Climate change is also predicted to affect the behavior or plant species including seed production, seedling establishment, growth, and vigor due to rising temperatures. Precipitation changes will affect forests due to longer dry periods and moisture deficits and drought conditions that limit seedling and sapling growth. Prolonged drought also weakens trees, making them more susceptible to disease and pest invasion. Furthermore, as trees die due to disease and pest invasion (i.e. the Bark Beetle invasion of the San Bernardino Forest), wildfires can spread more rapidly.

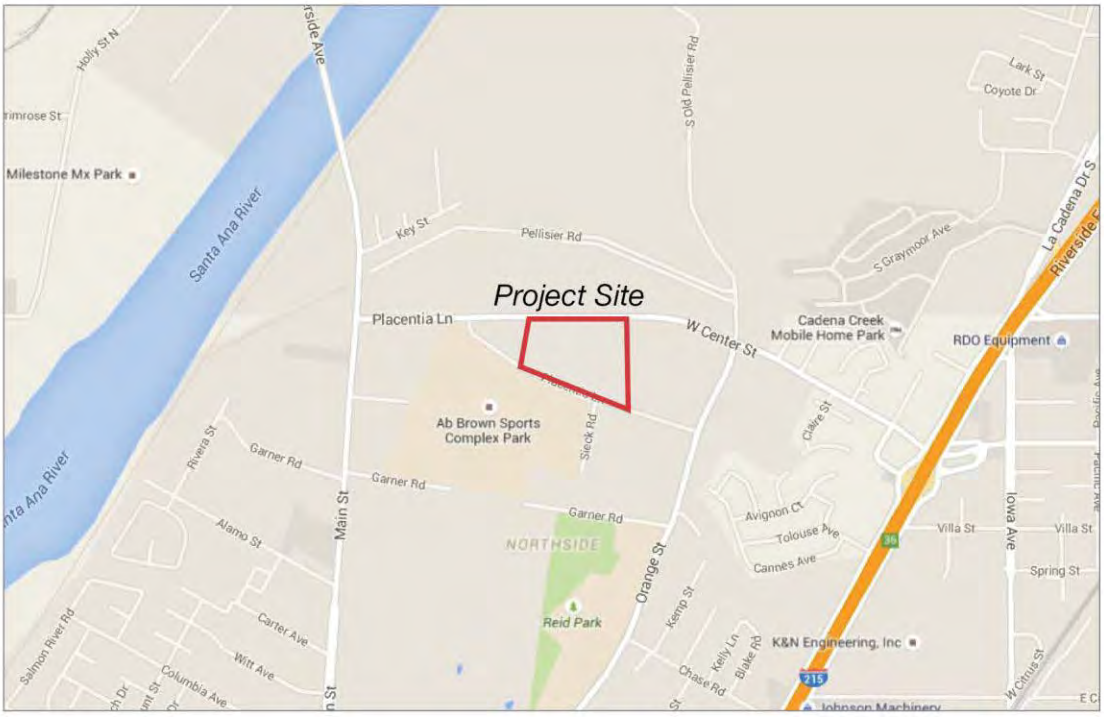
Transportation and Energy Infrastructure

Higher temperatures will require increased cooling, raising energy production demand. Higher temperatures also decrease the efficiency of distributing electricity and could lead to more power outages during peak demand. Climate changes would impact the effectiveness of California's transportation infrastructure as extreme weather events damage, destroy, and impair roadways and railways throughout the state causing governmental costs to increase as well as impacts to human life as accidents increase. Other infrastructure costs and potential impacts to life would increase due to the need to upgrade levees and other flood control devices throughout the state. Infrastructure improvement costs related to climate change adaptation are estimated in the tens of billions of dollars.



Source: Google Maps, 2015

Regional



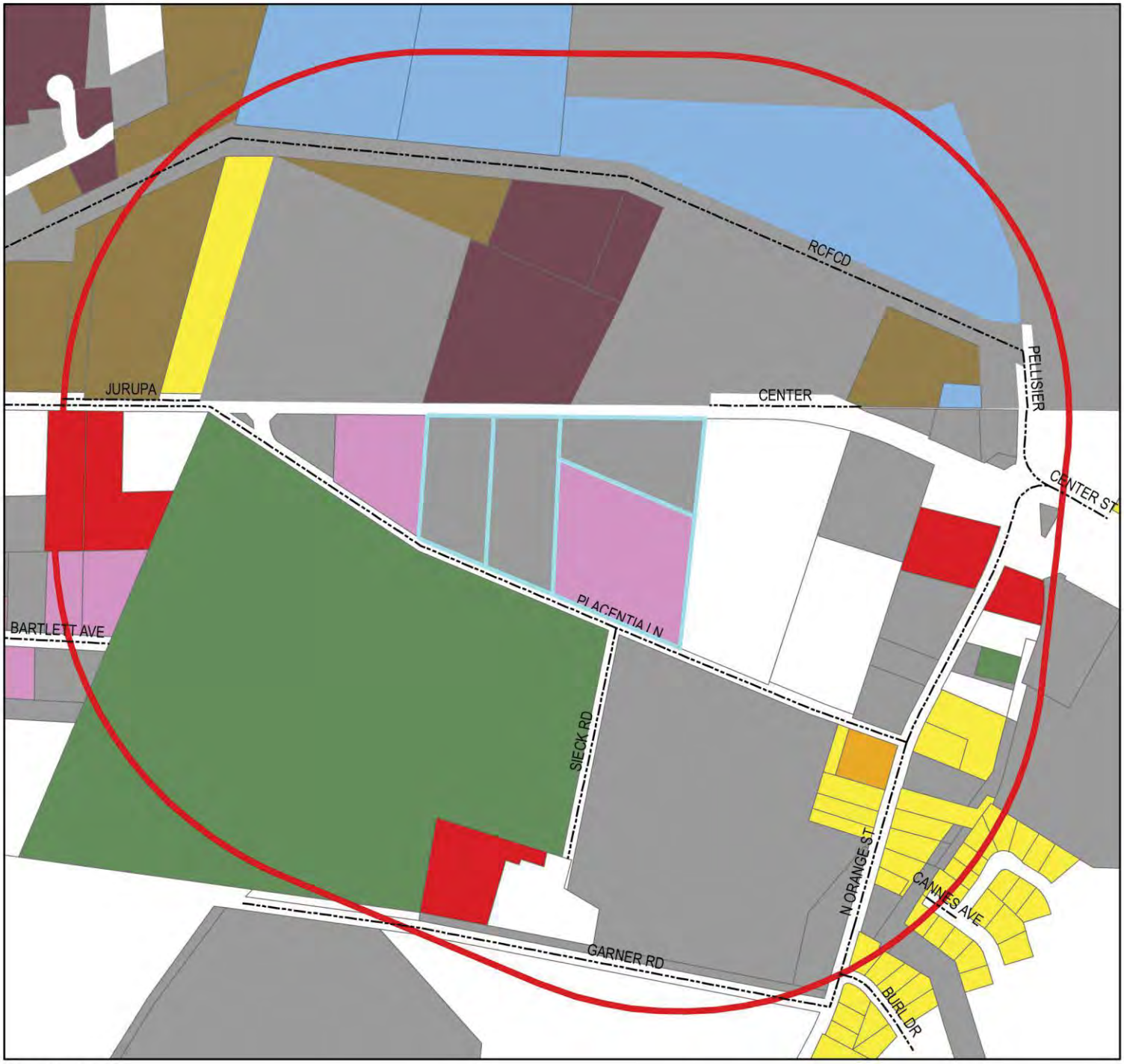
Source: Google Maps, 2015

Vicinity

Not to Scale

Exhibit 1 Regional and Vicinity Map

Center Street Commerce Building Project
6550 Center Street, Riverside, California



Legend

Project Site

0.25 Mile Radius

0 0.03 0.06 0.12 0.18 0.24 Miles

N

Land Uses

- Unknown
- Vacant
- Commercial
- Storage
- Light Industrial
- Residential Use in Commercial Zone
- Single Family Residential
- Multi-Family Residential
- Miscellaneous Structures
- Electric Power Transmissions

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Exhibit 2 Radius Map

Center Street Commerce Building Project

6550 Center Street, Riverside, California

The following summarizes Federal, State, and local regulations related to air quality, pollution control, greenhouse gas emissions.

4.1 Clean Air Act

The Federal Clean Air Act (CAA) defines the Environmental Protection Agency's (EPA) responsibilities for protecting and improving the United States air quality and ozone layer.[12] Key components of the CAA include reducing ambient concentrations of air pollutants that cause health and aesthetic problems, reducing emission of toxic air pollutants, and stopping production and use of chemicals that destroy the ozone.

Federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, Carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop State Implementation Plans (SIPs); comprehensive documents that identify how an area will attain NAAQS. Deadlines for attainment were established in the 1990 amendments to the CAA based on the severity of an area's air pollution problem. Failure to meet air quality deadlines can result in sanctions against the State or the EPA taking over enforcement of the CAA in the affected area. SIPs are a compilation of new and previously submitted plans, programs, district rules, and State and Federal regulations. The SCAQMD implements the required provisions of an applicable SIP through its AQMP. Currently, SCAQMD implements the 8-hr Ozone and $PM_{2.5}$ SIP in the 2007 AQMP and the PM_{10} SIP in the 2003 AQMP. The $PM_{2.5}$ SIP is currently being revised by SCAQMD in response to partial disapproval by the EPA. The 2012 Lead SIP for the Los Angeles County portion of SCAB was adopted by the SCAQMD Board on May 4, 2012 and approved by ARB on May 24, 2012 and forwarded to the EPA for approval as a revision to the California SIP.

4.2 California Clean Air Act

The California Clean Air Act (CCAA) of 1988 was enacted to develop plans and strategies for attaining California Ambient Air Quality Standards (CAAQS). The California Air Resources Board (ARB), which is part of the California Environmental Protection Agency (Cal-EPA), develops statewide air quality regulations, including industry-specific limits on criteria, toxic, and nuisance pollutants. The CCAA is more stringent than Federal law in a number of ways including revised standards for PM^{10} and ozone and State for visibility reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

4.3 2012 Air Quality Management Plan

The purpose of an Air Quality Management Plan (AQMP) is to bring an air basin into compliance with federal and state air quality standards and is a multi-tiered document that builds on previously adopted AQMPs.[13] The 2003 AQMP was adopted in August 2003 and demonstrated O_3 and PM_{10} for the Basin. It also provides the maintenance plans for CO and NO_2, which the Basin has been in attainment for since 1997 and 1992, respectively. The 2007 AQMP for the Basin was approved by the SCAQMD Board of Directors in June 2007. The 2007 AQMP builds on the 2003 AQMP and is designed to address the federal 8-hour ozone and $PM_{2.5}$ air quality standards. The AQMP identifies short- and long-term control measures designed to reduce stationary, area, and mobile source emissions, organized into four primary components:

1. District Stationary and Mobile Source Control Measures
2. Air Resources Board (ARB) State Strategy
3. Supplement to ARB Control Strategy
4. SCAG Regional Transportation Strategy and Control Measures

The 2012 AQMP was adopted by the SCAQMD board on December 7, 2012. The 2012 AQMP incorporated the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories. The 2012 AQMP includes the new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches. The SCAQMD is currently initiating an early development process for preparation of the 2016 AQMP.

4.4 SCAQMD Rule Book

In order to control air pollution in the Basin, SCAQMD adopts rules that establish permissible air pollutant emissions and governs a variety of businesses, processes, operations, and products to implement the AQMP and the various federal and state air quality requirements. SCAQMD does not adopt rules for mobile sources; those are established by ARB or the United States Environmental Protection Agency (EPA). Rules that will be applicable during construction of the proposed project include Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings). Rule 403 prohibits emissions of fugitive dust from any grading activity, storage pile, or other disturbed surface area if it crosses the project property line or if emissions caused by vehicle movement cause substantial impairment of visibility (defined as exceeding 20 percent opacity in the air). Rule 403 requires the implementation of Best Available Control Measures (BACM) and includes additional provisions for projects disturbing more than five acres and those disturbing more than fifty acres. Rule 1113 establishes maximum concentrations of VOCs in paints and other applications and establishes the thresholds for low-VOC coatings.

4.5 Executive Order S-3-05

Executive Order S-3-05 was issued by California Governor Arnold Schwarzenegger and established targets for the reduction of greenhouse gas emission at the milestone years of 2010, 2020, and 2050. Statewide GHG emissions must be reduced to 1990 levels by year 2020 and by 80 percent beyond that by year 2050. The Order requires the Secretary of the California Environmental Protection Agency (CalEPA) to coordinate with other State departments to identify strategies and reduction programs to meet the identified targets. A Climate Action Team (CAT) was created and is headed by the Secretary of CalEPA who reports on the progress of the reduction strategies. The latest CAT *Biennial Report to the Governor and Legislature* was completed in April 2010.[14] CAT also works in 11 subgroups to support development and implementation of the Scoping Plan (see "California Global Warming Solutions Act" herein).

4.6 Executive Order B-30-15

Executive Order B-30-15 was issued by California Governor Edmund G. Brown Jr. on April 29, 2015 to establish a California greenhouse gas reduction target of 40 percent below 1990 levels by 2030. This is meant as an interim target to ensure the state meets its ultimate goal of 80 percent below 1990 levels by 2050.

4.7 California Global Warming Solutions Act

The California State Legislature adopted the California Global Warming Solutions Act in 2006 (AB32). AB32 establishes the caps on statewide greenhouse gas emissions proclaimed in Executive Order S-3-05 and establishes a regulatory timeline to meet the reduction targets. The timeline is as follows:

January 1, 2009	Adopt Scoping Plan
January 1, 2010	Early action measures take effect
January 1, 2011	Adopt GHG reduction measures
January 1, 2012	Reduction measures take effect
December 31, 2020	Deadline for 2020 reduction target

As part of AB32, CARB had to determine what 1990 GHG emissions levels were and projected a business-as-usual (BAU) estimate for 2020 to determine the amount of GHG emissions that will need to be reduced. BAU is a term used to define emissions levels without considering reductions from future or existing programs or technologies. 1990 emissions are estimated at 427 million metric tons of carbon dioxide equivalent (MMTCO2E) while 2020 emissions (after accounting for the economic downturn in 2008 and implementation of Pavley 1 vehicle emissions reductions and the State Renewable Portfolio Standard identified in Air Resources Board Scoping Plan below) are estimated at 507 MMTCO2E; therefore, California GHG

emissions must be reduced 80 MMTCO2E (507 – 427 = 80) by 2020, a reduction of approximately 16 percent below BAU. Emissions are required to be reduced an additional 80 percent below 1990 levels by 2050.

4.8 Sustainable Communities and Climate Protection Act

In January 2009, California Senate Bill (SB) 375 went into effect known as the Sustainable Communities and Climate Protection Act.[15] The objective of SB375 is to better integrate regional planning of transportation, land use, and housing to reduce sprawl and ultimately reduce greenhouse gas emissions and other air pollutants. SB375 tasks ARB to set greenhouse gas reduction targets for each of California's 18 regional Metropolitan Planning Organizations (MPOs). Each MPO is required to prepare a Sustainable Communities Strategy (SCS) as part of their Regional Transportation Plan (RTP). The SCS is a growth strategy in combination with transportation policies that will show how the MPO will meet its GHG reduction target. If the SCS cannot meet the reduction goal, an Alternative Planning Strategy (APS) may be adopted that meets the goal through alternative development, infrastructure, and transportation measures or policies.

In the Southern California Association of Governments (SCAG) region (in which the proposed project is located), sub-regions can also elect to prepare their own SCS or APS. In August 2010, ARB released the proposed GHG reduction targets for the MPOs to be adopted in September 2010. The proposed reduction targets for the SCAG region were 8-percent by year 2020 and 13-percent by year 2035. The 8-percent year 2020 target was adopted in September 2010 and tentatively adopted the year 2035 until February 2011 to provide additional time for SCAG, ARB, and other stakeholders to account for additional resources (such as state transportation funds) needed to achieve the proposed targets. In February 2011, the SCAG President affirmed the year 2035 reduction target and SCAG Staff updated ARB on additional funding opportunities.

4.9 Air Resources Board Scoping Plan

The ARB Scoping Plan is the comprehensive plan to reach the GHG reduction targets stipulated in AB32. The key elements of the plan are to expand and strengthen energy efficiency programs, achieve a statewide renewable energy mix of 33 percent, develop a cap-and-trade program with other partners in the Western Climate Initiative (includes seven states in the United States and four territories in Canada), establish transportation-related targets, and establish fees.[16] The Scoping Plan measures are identified in Table 6 (Scoping Plan Measures). Note that the current early discrete actions are incorporated into these measures. ARB estimates that implementation of these measures will reduce GHG emissions in the state by 174 MMTCO2E by 2020; therefore, implementation of the Scoping Plan will meet the 2020 reduction target. In a report prepared on September 23, 2010, ARB indicates that 40 percent of the reduction measures identified in the Scoping Plan have been secured.[17] The cap-and-trade program began on January 1, 2012 after ARB completes a series of activities that deal with the registration process, compliance cycle, and tracking system; however, covered entities will not have an emissions obligation until 2013.[18] ARB is currently working on the low carbon fuel standard where public hearings and workshops are currently being conducted. In August 2011, the Scoping plan was reapproved by the ARB Board with the program's environmental documentation.

The ARB has prepared the First Update to the Scoping Plan (Update) with a draft made available for public review on February 10, 2014. The Update to the Scoping Plan builds upon the 2008 Scoping Plan with new strategies and recommendations. The Update identifies opportunities to leverage existing and new funds to further drive GHG emission reductions through strategic planning and targeted low carbon investments. The Update defines ARB's climate change priorities for the next five years and sets the groundwork to reach post-2020 goals set forth in Executive Orders S-3-05 and B-16-2012. The Update highlights California's progress toward meeting the 2020 GHG emission reduction goals defined in the 2008 Scoping Plan. It also evaluates how to align the State's long-term GHG reduction strategies with other State policy priorities for water, waste, natural resources, clean energy, transportation, and land use. A draft Environmental Analysis (EA) was released for a 45-day public review period on March 14, 2014. After considering public comments and Board direction, the final First Update, summary of comments received on the draft EA, and ARB's responses to those comments were released on May 15, 2014. The First Update to the Scoping Plan was approved by the Board on May 22, 2014.

4.10 Water Conservation in Landscaping Act

Section 65591 of the Government Code requires all local jurisdictions to adopt a water efficient landscape ordinance. The ordinance is to address water conservation through appropriate use and grouping of plants based on environmental conditions, water budgeting to maximize irrigation efficiency, storm water retention, and automatic irrigation systems. Failure to adopt a water efficiency ordinance requires a local jurisdiction to enforce the provisions of the State's model water efficiency ordinance. In 2009, the Department of Water Resources (DWR) updated the Model Water Efficient Landscape Ordinance pursuant to amendments to the 1991 Act. These amendments and the new model ordinance went into effect on January 1, 2010. The amended Act is applicable to any new commercial, multi-family, industrial or tract home project containing 2,500 square feet (SF) or more of landscaping. Individual landscape projects of 5,000 SF or more on single-family properties will also be subject to the Act. All landscape plans are required to include calculations verifying conformance with the maximum applied water allowance and must be prepared and stamped by a licensed landscape architect.

4.11 California Green Building Standards

New California Green Building Standards Code (CALGREEN) went into effect on January 1, 2011.[19] The purpose of the new addition to the California Building Code (CBC) is to improve public health, safety, and general welfare by enhancing the design and construction of buildings using concepts to reduce negative impacts or produce positive impacts on the environment. The CALGREEN regulations cover planning and design, energy efficiency, water efficiency and conservation, material conservation and resources efficiency, and environmental quality. Many of the new regulations have the effect of reducing greenhouse gas emissions from the operation of new buildings. Table 7 (CALGREEN Requirements) summarizes the previous requirements of the CBC and the new requirements of CALGREEN that went into effect in January 2011. Minor technical revisions and additional requirements went into effect in July 2012. The Code was further updated in 2013, effective January 1, 2014 through 2016.

Table 6
Scoping Plan Measures

Measure	Description
T-1	Pavely I and II – Light Duty Vehicle Greenhouse Gas Standards
T-2	Low Carbon Fuel Standard
T-3	Regional Transportation-Related Greenhouse Gas Targets
T-4	Vehicle Efficiency Measures
T-5	Ship Electrification at Ports
T-6	Good Movement Efficiency Measures
T-7	Heavy-Duty Vehicle Aerodynamic Efficiency
T-8	Medium and Heavy-Duty Vehicle Hybridization
T-9	High Speed Rail
E-1	Energy Efficiency (Electricity Demand Reduction)
E-2	Increase Combined Heat and Power Use
E-3	Renewable Portfolio Standard
E-4	Million Solar Roofs
CR-1	Energy Efficiency (Natural Gas Demand Reduction)
CR-2	Solar Water Heating
GB-1	Green Buildings
W-1	Water Use Efficiency
W-2	Water Recycling
W-3	Water System Energy Efficiency
W-4	Reuse Urban Runoff
W-5	Increase Renewable Energy Production
W-6	Public Good Charge (Water)
I-1	Energy Efficiency for Large Industrial Sources
I-2	Oil and Gas Extraction GHG Reductions
I-3	Oil and Gas Transmission Leak Reductions
I-4	Refinery Flare Recovery Process Improvements
I-5	Removal of Methane Exemption from Existing Refinery Regulations
RW-1	Landfill Methane Control
RW-2	Increase Landfill Methane Capture Efficiency
RW-3	Recycling and Zero Waste
F-1	Sustainable Forest Target
H-1	Motor Vehicle Air Conditioning
H-2	Non-Utilities and Non-Semiconductor SF_6 Limits
H-3	Semiconductor Manufacturing PFC Reductions
H-4	Consumer Products High GWP Limits
H-5	High GWP Mobile Source Reductions
H-6	High GWP Stationary Source Reductions
H-7	High GWP Mitigation Fees
A-1	Large Dairy Methane Capture

Table 7
CALGREEN Requirements

Item		Requirements	
		Previous	CALGREEN
4.1	Stormwater Management	Stormwater management required on projects > than one acre	All projects subject to stormwater management.
	Surface Drainage	Surface water must flow away from building	Drainage patterns must be analyzed
4.2	Energy Efficiency	California Energy Code	Minimum energy efficiency to be established by California Energy Commissions
4.3	Indoor Water Use	HCD maximum flush rates; CEC water use standards for appliances and fixtures	Indoor water use must decrease by at least 20 percent (prescriptive or performance based)
	Multiple Showerheads	Not covered	Multiple showerheads cannot exceed combined flow of the code
	Irrigation Controllers	Not covered	Irrigation controllers must be weather or soil moisture based controllers
4.4	Joint Protection	Plumbing and Mechanical Codes	All openings must be sealed with materials that rodents cannot penetrate
	Construction Waste	Local Ordinances	Establishes minimum 50 percent recycling and waste management plan
	Operation	Plumbing Code for gray water systems	Educational materials and manuals must be provided to building occupants and owners to ensure proper equipment operation
4.5	Fireplaces	Local Ordinances	Gas fireplaces must be direct-vent sealed-combustion type; Wood stoves and pellet stoves must meet USEPA Phase II emissions limits
	Mechanical Equipment	Not covered	All ventilation equipment must be sealed from contamination during construction
	VOCs	Local Ordinances	Establishes statewide limits on VOC emissions from adhesives, paints, sealants, and other coatings
	Capillary Break	No prescriptive method of compliance	Establishes minimum requirements for vapor barriers in slab on grade foundations
	Moisture Content	Current mill moisture levels for wall and floor beams is 15-20 percent	Moisture content must be verified prior to enclosure of wall or floor beams
	Whole House Fans	Not covered	Requires insulated louvers and closing mechanism when fan is off
	Bath Exhaust Fans	Not covered	Requires Energy Star compliance and humidistat control
	HVAC Design	Minimal requirements for heat loss, heat gain, and duct systems	Entire system must be designed in respects to the local climate
7	Installer Qualifications	HVAC installers need not be trained	HVAC installers must be trained or certified
	Inspectors	Training only required for structural materials	All inspectors must be trained

Source: HCD 2010

5 Project Description

The project includes the construction of a 308,000-square-foot building on 15.63 acres located south of Center Street and North of Placentia Lane in the City of Riverside, California. The project includes 110,591 square feet of landscaping, the potential for up to 282 parking stalls, and 47 loading docks.

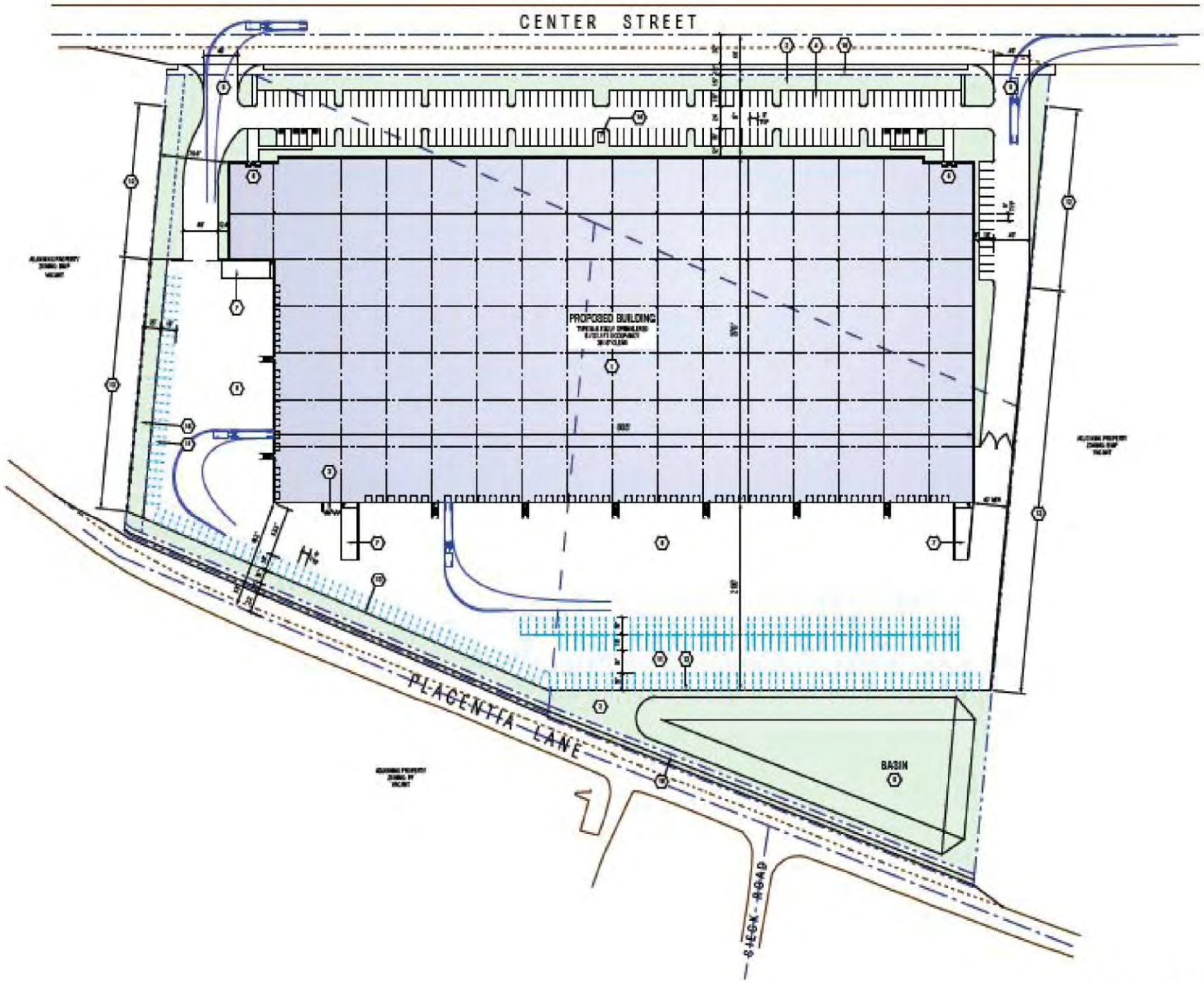

Exhibit 3 Site Plan

Center Street Commerce Building Project
6550 Center Street, Riverside, California

The impact analysis contained herein was prepared utilizing guidance provided in the 1993 SCAQMD California Environmental Quality Act (CEQA) Air Quality Handbook. The thresholds identified in Appendix G of the State CEQA Guidelines, as implemented by the City of Riverside, have been utilized to determine the significance of potential impacts.

6.1 Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines and the local implementation procedures of the City of Riverside, the project could result in potentially significant impacts related to air quality if it:

A. Conflicts with or obstructs implementation of the applicable air quality plan.
B. Violates any air quality standard or contributes substantially to an existing or projected air quality violation.
C. Results in a cumulatively considerable net increase of any criteria pollutant that the region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).
D. Exposes sensitive receptors to substantial pollutant concentrations.
E. Create objectionable odors affecting a substantial number of people.

To determine if maximum daily criteria pollutant emissions from construction and operation of the proposed project are significant, the SCAQMD significance thresholds are used. These thresholds are identified in Table 8 (SCAQMD Maximum Daily Emissions Thresholds (lbs/day)).

Table 8
SCAQMD Maximum Daily Emissions Thresholds (lbs/days)

Pollutant	Construction	Operation
NO_X	100	55
VOC/ROG	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
CO	550	550
Lead	3	3
Source: SCAQMD 2015		

6.2 AQMP Consistency

A significant impact could occur if the proposed project conflicts with or obstructs the implementation of South Coast Air Basin 2012 Air Quality Management Plan. Conflicts and obstructions that hinder implementation of the AQMP can delay efforts to meet attainment deadlines for criteria pollutants and maintaining existing compliance with applicable air quality standards. Pursuant to the methodology provided in Chapter 12 of the 1993 SCAQMD CEQA Air Quality Handbook, consistency with the South Coast Air Basin 2012 Air Quality Management Plan (AQMP) is affirmed when a project (1) does not increase the frequency or severity of an air quality standards violation or cause a new violation and (2) is consistent with the growth assumptions in the AQMP.[20] Consistency review is presented below:

1. The project would result in short-term construction and long-term pollutant emissions that are less than the CEQA significance emissions thresholds established by the SCAQMD, as demonstrated in Section 6.3 et seq of this report; therefore, the project could not result in an increase in the frequency or severity of any air quality standards violation and will not cause a new air quality standard violation.

2. The CEQA Air Quality Handbook indicates that consistency with AQMP growth assumptions must be analyzed for new or amended General Plan elements, Specific Plans, and *significant projects*. *Significant projects* include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and off-shore drilling facilities; therefore, the proposed project is not defined as *significant*. This project does not include a General Plan Amendment and therefore does not required consistency analysis with the AQMP.

Based on the consistency analysis presented above, the proposed project will not conflict with the AQMP.

6.3 Pollutant Emissions

6.3.1 Construction

Short-term criteria pollutant emissions will occur during demolition, site grading, building construction, paving, and architectural coating activities. Emissions will occur from use of equipment, worker, vendor, and hauling trips, and disturbance of onsite soils (fugitive dust). To determine if construction of the proposed project could result in a significant air quality impact, the California Emissions Estimator Model (CalEEMod) has been utilized. CalEEMod defaults have generally been used as construction inputs into the model (see Appendix A for input values). The methodology for calculating emissions is included in the CalEEMod *User Guide,* freely available at http://www.caleemod.com.

It was estimated that 7,416 square feet of existing, on-site structures will be demolished to accommodate the project. Construction of the building is anticipated to start in early 2016. CalEEMod defaults for construction schedule phase duration and equipment needs were utilized. Based on the results of the model, maximum daily emissions from the construction of the project will result in excessive emissions of volatile organic chemicals (identified as reactive organic gases) associated with interior and exterior coating activities. To compensate for excessive VOC emissions from coating activities, the model includes use of a minimum 37 grams per liter (g/l) VOC content for interior and exterior coatings, as identified in the project description. Use of low-VOC coatings during construction activities will reduce VOC emissions to 72 lbs/day, less than the threshold established by SCAQMD.

Table 9
Daily Construction Emissions (lbs/day)

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
2016	7	75	50	<1	21	13
2017	72	37	45	<1	6	3
Winter						
2016	7	75	50	<1	21	13
2017	72	37	46	<1	6	3
Threshold	75	100	550	150	150	55
Substantial?	No	No	No	No	No	No

6.3.2 Operational and Area Sources

Long-term criteria air pollutant emissions will result from the operation of the proposed project. Long-term emissions are categorized as area source emissions, energy demand emissions, and operational emissions. Operational emissions will result from automobile, truck, and other vehicle sources associated with daily trips to and from the project. Area source emissions are the combination of many small emission sources that include use of outdoor landscape maintenance equipment, use of consumer products such as cleaning products, and periodic repainting of the proposed project. Energy demand emissions result from use of electricity and natural gas. Emissions from area sources were estimated using CalEEMod defaults.

The California Emissions Estimator Model (CalEEMod) was utilized to estimate mobile source emissions. Trip generation (1.68 daily trips per 1,000 SF) is based on the trip generation rates provided in the Institute of Transportation Engineers *Trip Generation Manual* (9th Edition).[21] Based on SCAQMD recommendations, an average rate of 0.64 trucks per 1,000 square feet has been applied for purposes of this analysis.[22] Passenger vehicles will consist of 61.80 percent of the fleet mix, light-duty trucks will consist of 6.46 percent of the fleet mix, medium-heavy duty trucks will consist of 8.70 percent of the truck trips, and heavy-heavy duty truck trips consist of 23.04 percent of the fleet mix. Trip lengths have been adjusted based on a study of metropolitan commercial and freight travel conducted by the National Cooperative Highway Research Program. According to observed data collected in the field for the Southern California Association of Governments (SCAG) region, trip lengths for similar uses are estimated at 5.92 miles for light-duty trucks, 13.06 for medium-duty trucks, and 22.40 for heavy-duty trucks. Total vehicle miles were calculated using the average daily trips for each vehicle class and divided by total daily truck trips to get to an average truck distance of 17.41 miles. Assuming an opening year of 2018, the results of the CalEEMod model for summer and winter operation of the project are summarized in Table 10 (Operational Daily Emissions). Based on the results of the model, operational emissions associated with operation the project will not exceed the thresholds established by SCAQMD.

Table 10
Operational Daily Emissions (lbs/day)

Source	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
Area Sources	16	<1	<1	0	<1	<1
Energy Demand	<1	<1	<1	<1	<1	<1
Mobile Sources	3	31	39	<1	8	2
Summer Total	*19*	*31*	*38*	*<1*	*8*	*2*
Winter						
Area Sources	16	<1	<1	0	<1	<1
Energy Demand	<1	<1	<1	<1	<1	<1
Mobile Sources	3	32	41	<1	8	2
Winter Total	*19*	*32*	*41*	*<1*	*8*	*2*
Threshold	55	55	550	150	150	55
Substantial?	No	No	No	No	No	No

6.4 Sensitive Receptors

6.4.1 Localized Significance Thresholds

As part of SCAQMD's environmental justice program, attention has recently been focusing more on the localized effects of air quality. Although the region may be in attainment for a particular criteria pollutant, localized emissions from construction activities coupled with ambient pollutant levels can cause localized increases in criteria pollutant that exceed national and/or State air quality standards.

Construction-related criteria pollutant emissions and potentially significant localized impacts were evaluated pursuant to the SCAQMD Final Localized Significance Thresholds Methodology. This methodology provides screening tables for one through five acre project scenarios, depending on the amount of site disturbance during a day using the Fact Sheet for equipment usage in CalEEMod.[23] Daily oxides of nitrogen (NO_X), carbon monoxide (CO), and particulate matter (PM_{10} and $PM_{2.5}$) emissions will occur during construction of the project, grading of the project site, and paving of facility parking lots and drive aisles. Table 11 (Localized Significance Threshold Analysis) summarize on- and off-site emissions as compared to the local thresholds established for Source Receptor Area (SRA) 23 (Metropolitan Riverside County). Based on the use of four tractors and three dozers during site preparation activities, a 3.5-acre threshold will be used (using linear regression). A 50 meter receptor distance was used to reflect the proximity of residential uses to the sports fields south of the proejct site. Note that particulate matter emissions account for daily watering required by SCAQMD Rule 403 (three times per day for a 55 percent reduction in fugitive dust). Emissions from construction activities will not exceed any localized threshold.

Table 11
Localized Significance Threshold Analysis (lbs/day)

Phase	CO	NO_X	PM^{10}	$PM^{2.5}$
Demolition	35	46	2	2
Site Preparation	41	55	11	7
Grading	49	75	12	7
Building Construction	19	29	2	2
Paving	15	20	1	1
Architectural Coating	2	2	<1	<1
Threshold	1,708	248	28	8
Potentially Substantial?	No	No	No	No

Operation-related LSTs become of concern when there are substantial on-site stationary sources that could impact surrounding receptors. The proposed project does not include such on-site operations; therefore, impacts related to operational LSTs will not occur.

6.4.2 Carbon Monoxide Hotspots

A carbon monoxide (CO) hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. CO hotspots have the potential to violate State and Federal CO standards at intersections, even if the broader Basin is in attainment for Federal and State levels. The California Department of Transportation Project-Level Carbon Monoxide Protocol (Protocol) screening procedures have been utilized to determine if the proposed project could potentially result in a CO hotspot. Based on the recommendations of the Protocol, a screening analysis should be performed for the proposed project to determine if a detailed analysis will be required. The California Department of Transportation notes that because of the age of the assumptions used in the screening procedures and the obsolete nature of the modeling tools utilized to develop the screening procedures in the Protocol, they are no longer accepted. More recent screening procedures based on more current methodologies have been developed. The Sacramento Metropolitan Air Quality Management District (SMAQMD) developed a screening threshold in 2011 which states that any project involving an intersection experiencing 31,600 vehicles per hour or more will require detailed analysis. In addition, the Bay Area Air Quality Management District developed a screening threshold in 2010 which states that any project involving an intersection experiencing 44,000 vehicles per hour would require detailed analysis. The proposed project's operations would not involve an intersection experiencing this level of traffic; therefore, the proposed project passes the screening analysis and impacts are deemed less than significant. Based on the local analysis procedures, the proposed project would not result in a CO hotspot.

6.5 Odors

According to the CEQA Air Quality Handbook, land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). The proposed project is sited within an existing industrial and commercial area. The proposed project does not produce odors that would affect a substantial number of people considering that the proposed project will not result in heavy manufacturing activities.

6.6 Cumulative Impacts

6.6.1 Cumulative Construction Impacts

Cumulative short-term, construction-related emissions from the project will not contribute considerably to any potential cumulative air quality impact because short-term project emissions will be less than significant and other concurrent construction projects in the region will be required to implement standard air quality regulations and mitigation pursuant to State CEQA requirements, just as this project has.

6.6.2 Cumulative Operational Impacts

The SCAQMD CEQA Air Quality Handbook identifies methodologies for analyzing long-term cumulative air quality impacts for criteria pollutants for which the Basin is nonattainment. These methodologies identify three performance standards that can be used to determine if long-term emissions will result in cumulative impacts. Essentially, these methodologies assess growth associated with a land use project and are evaluated for consistency with regional projections. These methodologies are outdated, and are no longer recommended by SCAQMD. SCAQMD allows a project to be analyzed using the projection method such that consistency with the AQMP will indicate that a project will not contribute considerably to cumulative air quality impacts. As discussed in AQMP Consistency, the proposed project is consistent with growth assumptions in the AQMP, and would not exceed any applicable SCAQMD thresholds for short- and long-term emissions. Therefore, the proposed project will not contribute to any potential cumulative air quality impacts.

7.1 Thresholds of Significance

The proposed project could result in potentially significant impacts related to greenhouse gas emissions and global climate change if it would:

A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

B. Conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases.

A numerical threshold for determining the significance of greenhouse gas emissions in the South Coast Air Basin (Basin) has not been established by the South Coast Air Quality Management District (SCAQMD). As an interim threshold based on guidance provided in the CAPCOA *CEQA and Climate Change* handbook, a non-zero threshold approach based on Approach 2 of the handbook has been used. Threshold 2.5 (Unit-Based Thresholds Based on Market Capture) establishes a numerical threshold based on capture of approximately 90 percent of emissions from future development. The latest threshold developed by SCAQMD using this method is 10,000 metric tons carbon dioxide equivalent (MTCO2E) per year for industrial projects.[24] This threshold is based on the review of 711 CEQA projects. This threshold will be utilized herein to determine if emissions of greenhouse gases from this project will be significant.

7.2 Direct and Indirect Emissions

The proposed project will include activities that emit greenhouse gas emissions over the short- and long-term. While one project could not be said to cause global climate change, individual projects contribute cumulatively to greenhouse gas emissions that result in climate change. A greenhouse gas emissions inventory was prepared for the project using under BAU conditions and is analyzed below.

7.2.1 Short-Term Emissions

The project will result in short-term greenhouse gas emissions from construction and installation activities associated with construction of the proposed project. Greenhouse gas emissions will be released by equipment used for grading, paving, and building construction activities. GHG emissions will also result from worker and vendor trips to and from the project site. Table 12 (Construction Greenhouse Gas Emissions) summarizes the estimated yearly emissions from construction activities. Carbon dioxide emissions from construction equipment and worker/vendor trips were estimated utilizing the California Emissions Estimator Model (CalEEMod) version 2013.2.2 (see Appendix A). Construction activities are short-term and cease to emit greenhouse gases upon completion, unlike operational emissions that are continuous year after year until operation of the use ceases. Because of this difference, SCAQMD recommends in its draft threshold to amortize construction emissions over a 30-year operational lifetime. This normalizes construction emissions so that they can be grouped with operational emissions in order to generate a precise project GHG inventory. Amortized construction emissions are included in Table 12.

Table 12
Construction Greenhouse Gas Emissions

Construction Year	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
2016	933	<1	0	936
2017	396	<1	0	397
*AMORTIZED TOTAL^*	*44*	*<1*	*0*	*44*

* MTCO2E
Note: Slight variations may occur due to rounding and variations in modeling software
^ Amortized over 30-years

7.2.2 Long-Term Emissions

Warehousing and distribution activities will result in continuous greenhouse gas emissions from mobile and operational sources. Mobile sources including vehicle trips to and from the project site will result primarily in emissions of CO_2 with minor emissions of CH_4 and N_2O. The most significant GHG emission from natural gas usage will be methane. Electricity usage by the project and indirect usage of electricity for water and wastewater conveyance will result primarily in emissions of carbon dioxide. Disposal of solid waste will result in emissions of methane from the decomposition of waste at landfills coupled with CO_2 emission from the handling and transport of solid waste. These sources combine to define the long-term greenhouse gas emissions for the build-out of the proposed project.

To determine long-term emissions, CalEEMod was used. The methodology utilized for each emissions source is based on the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures* handbook.[25] A summary of the project's net long-term greenhouse gas emissions is included in Table 13 (Operational Greenhouse Gas Emissions). Emissions are presented as metric tons of carbon dioxide equivalent (MTCO2E) meaning that all emissions have been weighted based on their Global Warming Potential (GWP) (a metric ton is equal to 1.102 US short tons).

Table 13
Operational Greenhouse Gas Emissions

Source	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
Area	<1	<1	0	<1
Energy	738	<1	<1	740
Mobile	2,123	<1	0	2,123
Solid Waste	59	3	0	131
Water/Wastewater	598	2	<1	664
TOTAL	*3,517*	*6*	*<1*	*3,659*

* MTCO2E/YR
Note: Slight variations may occur due to rounding

Mobile sources are based on annual vehicle miles traveled (VMT) based on daily trip generation identified in the trip generation memorandum.[26] Trip lengths have been adjusted based on a study of metropolitan commercial and freight travel conducted by the National Cooperative Highway Research Program. According to observed data collected in the field for the Southern California Association of Governments (SCAG) region, trip lengths for similar uses are estimated at 5.92 miles for light-duty trucks, 13.06 for medium-duty trucks, and 22.40 for heavy-duty trucks. Total vehicle miles were calculated using the average daily trips for each vehicle class and divided by total daily truck trips to get to an average truck distance of 17.41 miles. Natural gas usage and electricity usage are based on default demand figures utilized in CalEEMod. Solid waste generation is also based on CalEEMod defaults.

CalEEMod does not include outdoor landscape irrigation demand defaults for this type of project. Estimated irrigation needs for landscaping was calculated at 2,591,811 gallons per year. Landscape irrigation requirements were calculated using the

California Department of Water Resources (DWR) *Water Budget* Workbook that calculates the Maximum Applied Water Allowance (MAWA) for landscaping based on the requirements of the state water conservation in landscaping act.[27] This reflects the maximum allowable amount of water that is permitted to be used annually after consideration of effective precipitation (25 percent of annual rainfall). MAWA is calculated using the following equation:

$$MAWA = (ET_0 - Eppt) * 0.62 * [(0.70 * LA) + (0.30 * SLA)]$$

Where:

MAWA = Maximum Applied Water Allowance (gallons per year)
ET_0 = Reference Evapotranspiration for Locale (inches per year)
Eppt = Effective Precipitation (inches per year)
LA = Landscape Area (square feet)
SLA = Special Landscape Area (square feet)

Indoor water demand and wastewater discharges are based on CalEEMod defaults.

7.2.3 Greenhouse Gas Emissions Inventory

Table 14 (Greenhouse Gas Emissions Inventory) summarizes the yearly estimated greenhouse gas emissions from construction and operational sources. The total yearly carbon dioxide equivalent emissions for the proposed project are estimated at 3,703 MTCO2E. This does not exceed the SCAQMD threshold of 10,000 MTCO2E per year.

Table 14
Greenhouse Gas Emissions Inventory

Source	GHG Emissions (MT/YR)			
	CO_2	CH_4	N_2O	TOTAL*
Construction	*44*	*<1*	*0*	*44*
Operation	*3,517*	*6*	*<1*	*3,659*
			Total	

* MTCO2E/YR
Note: Slight variations may occur due to rounding
^ Construction impacts amortized over 30-years

7.3 Greenhouse Gas Emissions Reduction Planning

ARB's *Scoping Plan* identifies strategies to reduce California's greenhouse gas emissions in support of AB32. Many of the strategies identified in the Scoping Plan are not applicable at the project level, such as long-term technological improvements to reduce emissions from vehicles. Some measures are applicable and supported by the project, such as energy efficiency. Finally, while some measures are not directly applicable, the project would not conflict with their implementation. Reduction measures are grouped into 18 action categories, as follows:

1. California Cap-and-Trade Program Linked to Western Climate Initiative Partner Jurisdictions. Implement a broad-based California cap-and-trade program to provide a firm limit on emissions. Link the California cap–and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California.[28] Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.
2. California Light-Duty Vehicle Greenhouse Gas Standards. Implement adopted Pavley standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.

3. Energy Efficiency. Maximize energy efficiency building and appliance standards, and pursue additional efficiency efforts including new technologies, and new policy and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California (including both investor-owned and publicly owned utilities).
4. Renewables Portfolio Standards. Achieve 33 percent renewable energy mix statewide.
5. Low Carbon Fuel Standard. Develop and adopt the Low Carbon Fuel Standard.
6. Regional Transportation-Related Greenhouse Gas Targets. Develop regional greenhouse gas emissions reduction targets for passenger vehicles.
7. Vehicle Efficiency Measures. Implement light-duty vehicle efficiency measures.
8. Goods Movement. Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.
9. Million Solar Roofs Program. Install 3,000 megawatts of solar-electric capacity under California's existing solar programs.
10. Medium- and Heavy-Duty Vehicles. Adopt medium- (MD) and heavy-duty (HD) vehicle efficiencies. Aerodynamic efficiency measures for HD trucks pulling trailers 53-feet or longer that include improvements in trailer aerodynamics and use of rolling resistance tires were adopted in 2008 and went into effect in 2010.[29] Future, yet to be determined improvements, includes hybridization of MD and HD trucks.
11. Industrial Emissions. Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.
12. High Speed Rail. Support implementation of a high speed rail system.
13. Green Building Strategy. Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.
14. High Global Warming Potential Gases. Adopt measures to reduce high warming global potential gases.
15. Recycling and Waste. Reduce methane emissions at landfills. Increase waste diversion, composting and other beneficial uses of organic materials, and mandate commercial recycling. Move toward zero-waste.
16. Sustainable Forests. Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation. The 2020 target for carbon sequestration is 5 million MTCO2E/YR.
17. Water. Continue efficiency programs and use cleaner energy sources to move and treat water.
18. Agriculture. In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.

Table 15 (Scoping Plan Consistency Summary) summarizes the project's consistency with the State Scoping Plan. As summarized, the project will not conflict with any of the provisions of the Scoping Plan and in fact supports seven of the action categories through water conservation and recycling.

Table 15
Scoping Plan Consistency Summary

Action	Supporting Measures	Consistency
Cap-and-Trade Program	--	Not Applicable. These programs involve capping emissions from electricity generation, industrial facilities, and broad scoped fuels. Caps do not directly affect this type of project.
Light-Duty Vehicle Standards	T-1	Not Applicable. This is a statewide measure establishing vehicle emissions standards.
Energy Efficiency	E-1	Consistent. The project will not conflict with any State mandated energy efficiency requirements.
	E-2	
	CR-1	
	CR-2	
Renewables Portfolio Standard	E-3	Not Applicable. Establishes the minimum statewide renewable energy mix.
Low Carbon Fuel Standard	T-2	Not Applicable. Establishes reduced carbon intensity of transportation fuels.
Regional Transportation-Related Greenhouse Gas Targets	T-3	Consistent. The project includes features that reduce greenhouse gas emissions, assisting the region in meeting emissions targets.
Vehicle Efficiency Measures	T-4	Not Applicable. Identifies measures such as minimum tire-fuel efficiency, lower friction oil, and reduction in air conditioning use.
Goods Movement	T-5	Not applicable. Identifies measures to improve goods movement efficiencies such as advanced combustion strategies, friction reduction, waste heat recovery, and electrification of accessories. While these measures are yet to be implemented and will be voluntary, the proposed project would not interfere with their implementation.
	T-6	
Million Solar Roofs Program	E-4	Not Applicable. Sets goal for use of solar systems throughout the state. While the project currently does not include solar energy generation, the buildings could support solar panels in the future.
Medium- & Heavy-Duty Vehicles	T-7	Consistent. MD and HD trucks and trailers working from the proposed project will be subject to aerodynamic and hybridization requirements as established by ARB; no feature of the project would interfere with implementation of these requirements and programs.
	T-8	
Industrial Emissions	I-1	Not Applicable. These measures are applicable to large industrial facilities (> 500,000 MTCOE2/YR) and other intensive uses such as refineries.
	I-2	
	I-3	

Action	Supporting Measures	Consistency
	I-4	
	I-5	
High Speed Rail	T-9	Not Applicable. Supports increased mobility choice.
Green Building Strategy	GB-1	Consistent. The project includes water and solid waste efficiencies consistent with 2011 CALGREEN requirements.
High Global Warming Potential Gases	H-1	Not Applicable. The proposed project is not a substantial source of high GWP emissions and will comply with any future changes in air conditioning, fire protection suppressant, and other requirements.
	H-2	
	H-3	
	H-4	
	H-5	
	H-6	
	H-7	
Recycling and Waste	RW-1	Consistent. The project is subject to a minimum 50 percent recycling standard and will recycle a minimum of 50 percent of construction debris per State and City requirements.
	RW-2	
	RW-3	
Sustainable Forests	F-1	Consistent. The project will increase carbon sequestration by maintaining on-site trees in project landscaping.
Water	W-1	Consistent. The project includes use of recycled water and low-flow fixtures.
	W-2	
	W-3	
	W-4	
	W-5	
	W-6	
Agriculture	A-1	Not Applicable. The project is not an agricultural use.

None required.

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Center Street Warehouse

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	308.00	1000sqft	7.07	308,000.00	0
Other Non-Asphalt Surfaces	101.59	1000sqft	2.33	101,591.00	0
Parking Lot	6.23	Acre	6.23	271,378.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2018
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Demolition -

Vehicle Trips - Trip Rate Per ITE
Trip % Per SCAQMD Recommendation
Trip Length NCHRP Analysis

Vechicle Emission Factors - Fleet Mix Per SCAQMD Recommendation

Vechicle Emission Factors - Fleet Mix Per SCAQMD Recommendation

Vechicle Emission Factors - Fleet Mix Per SCAQMD Recommendation

Water And Wastewater - Include Landscape Water Demand

Table Name	Column Name	Default Value	New Value
tblProjectCharacteristics	OperationalYear	2014	2018
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	LHD2	6.6470e-003	0.00

tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	17.41
tblVehicleTrips	CNW_TTP	41.00	38.00
tblVehicleTrips	CW_TTP	59.00	62.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.59	1.68
tblVehicleTrips	SU_TR	2.59	1.68
tblVehicleTrips	WD_TR	2.59	1.68
tblWater	OutdoorWaterUseRate	0.00	2,591,811.00

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					
2016	0.7319	6.0180	6.3385	0.0109	0.6172	0.3094	0.9266	0.2104	0.2887	0.4992	0.0000	933.9305	933.9305	0.1203	0.0000	936.4575
2017	5.1232	2.0690	2.4978	4.7900e-003	0.1973	0.1096	0.3070	0.0531	0.1027	0.1558	0.0000	396.4230	396.4230	0.0442	0.0000	397.3502
Total	**5.8551**	**8.0870**	**8.8363**	**0.0157**	**0.8146**	**0.4190**	**1.2336**	**0.2635**	**0.3914**	**0.6549**	**0.0000**	**1,330.3535**	**1,330.3535**	**0.1645**	**0.0000**	**1,333.8078**

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					
2016	0.7319	6.0180	6.3385	0.0109	0.6172	0.3094	0.9266	0.2104	0.2887	0.4992	0.0000	933.9300	933.9300	0.1203	0.0000	936.4571
2017	5.1232	2.0690	2.4978	4.7900e-003	0.1973	0.1096	0.3070	0.0531	0.1027	0.1558	0.0000	396.4229	396.4229	0.0442	0.0000	397.3501
Total	**5.8551**	**8.0870**	**8.8363**	**0.0157**	**0.8146**	**0.4190**	**1.2336**	**0.2635**	**0.3914**	**0.6549**	**0.0000**	**1,330.3529**	**1,330.3529**	**0.1645**	**0.0000**	**1,333.8071**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
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**

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	2.9453	5.0000e-005	5.3800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0103	0.0103	3.0000e-005	0.0000	0.0109
Energy	3.5500e-003	0.0323	0.0271	1.9000e-004		2.4600e-003	2.4600e-003		2.4600e-003	2.4600e-003	0.0000	738.0824	738.0824	0.0161	3.8300e-003	739.6056
Mobile	0.5393	5.9251	7.3224	0.0258	1.2545	0.0970	1.3515	0.3399	0.0893	0.4292	0.0000	2,122.7304	2,122.7304	0.0359	0.0000	2,123.4849
Waste						0.0000	0.0000		0.0000	0.0000	58.7699	0.0000	58.7699	3.4732	0.0000	131.7072
Water						0.0000	0.0000		0.0000	0.0000	22.5964	574.9771	597.5735	2.3335	0.0574	664.3708
Total	**3.4881**	**5.9575**	**7.3549**	**0.0260**	**1.2545**	**0.0995**	**1.3540**	**0.3399**	**0.0918**	**0.4316**	**81.3664**	**3,435.8001**	**3,517.1664**	**5.8587**	**0.0612**	**3,659.1793**

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	2.9453	5.0000e-005	5.3800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0103	0.0103	3.0000e-005	0.0000	0.0109
Energy	3.5500e-003	0.0323	0.0271	1.9000e-004		2.4600e-003	2.4600e-003		2.4600e-003	2.4600e-003	0.0000	738.0824	738.0824	0.0161	3.8300e-003	739.6056
Mobile	0.5393	5.9251	7.3224	0.0258	1.2545	0.0970	1.3515	0.3399	0.0893	0.4292	0.0000	2,122.7304	2,122.7304	0.0359	0.0000	2,123.4849
Waste						0.0000	0.0000		0.0000	0.0000	58.7699	0.0000	58.7699	3.4732	0.0000	131.7072
Water						0.0000	0.0000		0.0000	0.0000	22.5964	574.9771	597.5735	2.3330	0.0573	664.3347
Total	**3.4881**	**5.9575**	**7.3549**	**0.0260**	**1.2545**	**0.0995**	**1.3540**	**0.3399**	**0.0918**	**0.4316**	**81.3664**	**3,435.8001**	**3,517.1664**	**5.8582**	**0.0612**	**3,659.1433**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
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**	**0.01**	**0.13**	**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	1/1/2016	1/28/2016	5	20	
2	Site Preparation	Site Preparation	1/29/2016	2/11/2016	5	10	
3	Grading	Grading	2/12/2016	3/24/2016	5	30	
4	Building Construction	Building Construction	3/25/2016	5/18/2017	5	300	
5	Paving	Paving	5/19/2017	6/15/2017	5	20	
6	Architectural Coating	Architectural Coating	6/16/2017	7/13/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 626,599; Non-Residential Outdoor: 208,866 (Architectural Coating

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	162	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Building Construction	Welders	1	8.00	46	0.45

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	6	15.00	0.00	733.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	286.00	112.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	57.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

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	0.0429	0.4566	0.3503	4.0000e-004		0.0229	0.0229		0.0214	0.0214	0.0000	37.0974	37.0974	0.0101	0.0000	37.3092
Total	**0.0429**	**0.4566**	**0.3503**	**4.0000e-004**		**0.0229**	**0.0229**		**0.0214**	**0.0214**	**0.0000**	**37.0974**	**37.0974**	**0.0101**	**0.0000**	**37.3092**

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	6.5700e-003	0.1069	0.0803	2.7000e-004	6.2800e-003	1.5700e-003	7.8500e-003	1.7200e-003	1.4400e-003	3.1700e-003	0.0000	24.7136	24.7136	1.8000e-004	0.0000	24.7174
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	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436
Total	**7.1700e-003**	**0.1078**	**0.0895**	**2.9000e-004**	**7.9300e-003**	**1.5800e-003**	**9.5100e-003**	**2.1600e-003**	**1.4500e-003**	**3.6200e-003**	**0.0000**	**26.2555**	**26.2555**	**2.6000e-004**	**0.0000**	**26.2610**

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	0.0429	0.4566	0.3503	4.0000e-004		0.0229	0.0229		0.0214	0.0214	0.0000	37.0973	37.0973	0.0101	0.0000	37.3092
Total	**0.0429**	**0.4566**	**0.3503**	**4.0000e-004**		**0.0229**	**0.0229**		**0.0214**	**0.0214**	**0.0000**	**37.0973**	**37.0973**	**0.0101**	**0.0000**	**37.3092**

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	6.5700e-003	0.1069	0.0803	2.7000e-004	6.2800e-003	1.5700e-003	7.8500e-003	1.7200e-003	1.4400e-003	3.1700e-003	0.0000	24.7136	24.7136	1.8000e-004	0.0000	24.7174
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	6.0000e-004	8.8000e-004	9.1900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5419	1.5419	8.0000e-005	0.0000	1.5436
Total	**7.1700e-003**	**0.1078**	**0.0895**	**2.9000e-004**	**7.9300e-003**	**1.5800e-003**	**9.5100e-003**	**2.1600e-003**	**1.4500e-003**	**3.6200e-003**	**0.0000**	**26.2555**	**26.2555**	**2.6000e-004**	**0.0000**	**26.2610**

3.3 Site Preparation - 2016

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0254	0.2732	0.2055	2.0000e-004		0.0147	0.0147		0.0135	0.0135	0.0000	18.4386	18.4386	5.5600e-003	0.0000	18.5554
Total	**0.0254**	**0.2732**	**0.2055**	**2.0000e-004**	**0.0903**	**0.0147**	**0.1050**	**0.0497**	**0.0135**	**0.0632**	**0.0000**	**18.4386**	**18.4386**	**5.5600e-003**	**0.0000**	**18.5554**

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	3.6000e-004	5.3000e-004	5.5100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9251	0.9251	5.0000e-005	0.0000	0.9262
Total	**3.6000e-004**	**5.3000e-004**	**5.5100e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9251**	**0.9251**	**5.0000e-005**	**0.0000**	**0.9262**

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0254	0.2732	0.2055	2.0000e-004		0.0147	0.0147		0.0135	0.0135	0.0000	18.4385	18.4385	5.5600e-003	0.0000	18.5553
Total	**0.0254**	**0.2732**	**0.2055**	**2.0000e-004**	**0.0903**	**0.0147**	**0.1050**	**0.0497**	**0.0135**	**0.0632**	**0.0000**	**18.4385**	**18.4385**	**5.5600e-003**	**0.0000**	**18.5553**

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	3.6000e-004	5.3000e-004	5.5100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9251	0.9251	5.0000e-005	0.0000	0.9262
Total	**3.6000e-004**	**5.3000e-004**	**5.5100e-003**	**1.0000e-005**	**9.9000e-004**	**1.0000e-005**	**1.0000e-003**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**0.9251**	**0.9251**	**5.0000e-005**	**0.0000**	**0.9262**

3.4 Grading - 2016

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					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0972	1.1222	0.7371	9.3000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	87.2936	87.2936	0.0263	0.0000	87.8465
Total	**0.0972**	**1.1222**	**0.7371**	**9.3000e-004**	**0.1301**	**0.0538**	**0.1839**	**0.0540**	**0.0495**	**0.1034**	**0.0000**	**87.2936**	**87.2936**	**0.0263**	**0.0000**	**87.8465**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-003	1.7700e-003	0.0184	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.0837	3.0837	1.7000e-004	0.0000	3.0872
Total	**1.2000e-003**	**1.7700e-003**	**0.0184**	**4.0000e-005**	**3.2900e-003**	**3.0000e-005**	**3.3200e-003**	**8.7000e-004**	**3.0000e-005**	**9.0000e-004**	**0.0000**	**3.0837**	**3.0837**	**1.7000e-004**	**0.0000**	**3.0872**

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					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0972	1.1222	0.7371	9.3000e-004		0.0538	0.0538		0.0495	0.0495	0.0000	87.2935	87.2935	0.0263	0.0000	87.8464
Total	**0.0972**	**1.1222**	**0.7371**	**9.3000e-004**	**0.1301**	**0.0538**	**0.1839**	**0.0540**	**0.0495**	**0.1034**	**0.0000**	**87.2935**	**87.2935**	**0.0263**	**0.0000**	**87.8464**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-003	1.7700e-003	0.0184	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	3.0000e-005	9.0000e-004	0.0000	3.0837	3.0837	1.7000e-004	0.0000	3.0872
Total	**1.2000e-003**	**1.7700e-003**	**0.0184**	**4.0000e-005**	**3.2900e-003**	**3.0000e-005**	**3.3200e-003**	**8.7000e-004**	**3.0000e-005**	**9.0000e-004**	**0.0000**	**3.0837**	**3.0837**	**1.7000e-004**	**0.0000**	**3.0872**

3.5 Building Construction - 2016

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	0.3423	2.8649	1.8599	2.6900e-003		0.1977	0.1977		0.1858	0.1858	0.0000	243.3644	243.3644	0.0604	0.0000	244.6319
Total	**0.3423**	**2.8649**	**1.8599**	**2.6900e-003**		**0.1977**	**0.1977**		**0.1858**	**0.1858**	**0.0000**	**243.3644**	**243.3644**	**0.0604**	**0.0000**	**244.6319**

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	0.1002	1.0219	1.3118	2.4400e-003	0.0693	0.0159	0.0852	0.0198	0.0147	0.0344	0.0000	222.0237	222.0237	1.6200e-003	0.0000	222.0576
Worker	0.1153	0.1692	1.7605	3.8800e-003	0.3154	2.6900e-003	0.3180	0.0838	2.4700e-003	0.0862	0.0000	295.4487	295.4487	0.0159	0.0000	295.7826
Total	**0.2154**	**1.1911**	**3.0723**	**6.3200e-003**	**0.3846**	**0.0186**	**0.4032**	**0.1035**	**0.0171**	**0.1207**	**0.0000**	**517.4723**	**517.4723**	**0.0175**	**0.0000**	**517.8403**

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	0.3423	2.8649	1.8599	2.6900e-003		0.1977	0.1977		0.1858	0.1858	0.0000	243.3641	243.3641	0.0604	0.0000	244.6316
Total	**0.3423**	**2.8649**	**1.8599**	**2.6900e-003**		**0.1977**	**0.1977**		**0.1858**	**0.1858**	**0.0000**	**243.3641**	**243.3641**	**0.0604**	**0.0000**	**244.6316**

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	0.1002	1.0219	1.3118	2.4400e-003	0.0693	0.0159	0.0852	0.0198	0.0147	0.0344	0.0000	222.0237	222.0237	1.6200e-003	0.0000	222.0576
Worker	0.1153	0.1692	1.7605	3.8800e-003	0.3154	2.6900e-003	0.3180	0.0838	2.4700e-003	0.0862	0.0000	295.4487	295.4487	0.0159	0.0000	295.7826
Total	**0.2154**	**1.1911**	**3.0723**	**6.3200e-003**	**0.3846**	**0.0186**	**0.4032**	**0.1035**	**0.0171**	**0.1207**	**0.0000**	**517.4723**	**517.4723**	**0.0175**	**0.0000**	**517.8403**

3.5 Building Construction - 2017

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	0.1536	1.3071	0.8974	1.3300e-003		0.0882	0.0882		0.0828	0.0828	0.0000	118.5422	118.5422	0.0292	0.0000	119.1548
Total	**0.1536**	**1.3071**	**0.8974**	**1.3300e-003**		**0.0882**	**0.0882**		**0.0828**	**0.0828**	**0.0000**	**118.5422**	**118.5422**	**0.0292**	**0.0000**	**119.1548**

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	0.0451	0.4580	0.6123	1.2000e-003	0.0341	7.0100e-003	0.0411	9.7400e-003	6.4400e-003	0.0162	0.0000	107.5845	107.5845	7.7000e-004	0.0000	107.6007
Worker	0.0509	0.0753	0.7824	1.9100e-003	0.1553	1.2700e-003	0.1566	0.0413	1.1700e-003	0.0424	0.0000	139.9330	139.9330	7.2300e-003	0.0000	140.0848
Total	**0.0960**	**0.5333**	**1.3947**	**3.1100e-003**	**0.1894**	**8.2800e-003**	**0.1977**	**0.0510**	**7.6100e-003**	**0.0586**	**0.0000**	**247.5175**	**247.5175**	**8.0000e-003**	**0.0000**	**247.6855**

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	0.1536	1.3071	0.8974	1.3300e-003		0.0882	0.0882		0.0828	0.0828	0.0000	118.5420	118.5420	0.0292	0.0000	119.1547
Total	**0.1536**	**1.3071**	**0.8974**	**1.3300e-003**		**0.0882**	**0.0882**		**0.0828**	**0.0828**	**0.0000**	**118.5420**	**118.5420**	**0.0292**	**0.0000**	**119.1547**

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	0.0451	0.4580	0.6123	1.2000e-003	0.0341	7.0100e-003	0.0411	9.7400e-003	6.4400e-003	0.0162	0.0000	107.5845	107.5845	7.7000e-004	0.0000	107.6007
Worker	0.0509	0.0753	0.7824	1.9100e-003	0.1553	1.2700e-003	0.1566	0.0413	1.1700e-003	0.0424	0.0000	139.9330	139.9330	7.2300e-003	0.0000	140.0848
Total	**0.0960**	**0.5333**	**1.3947**	**3.1100e-003**	**0.1894**	**8.2800e-003**	**0.1977**	**0.0510**	**7.6100e-003**	**0.0586**	**0.0000**	**247.5175**	**247.5175**	**8.0000e-003**	**0.0000**	**247.6855**

3.6 Paving - 2017

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	0.0191	0.2030	0.1473	2.2000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	20.6934	20.6934	6.3400e-003	0.0000	20.8266
Paving	8.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0272**	**0.2030**	**0.1473**	**2.2000e-004**		**0.0114**	**0.0114**		**0.0105**	**0.0105**	**0.0000**	**20.6934**	**20.6934**	**6.3400e-003**	**0.0000**	**20.8266**

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	5.4000e-004	8.0000e-004	8.2900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total	**5.4000e-004**	**8.0000e-004**	**8.2900e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4827**	**1.4827**	**8.0000e-005**	**0.0000**	**1.4843**

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	0.0191	0.2030	0.1473	2.2000e-004		0.0114	0.0114		0.0105	0.0105	0.0000	20.6934	20.6934	6.3400e-003	0.0000	20.8265
Paving	8.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0272**	**0.2030**	**0.1473**	**2.2000e-004**		**0.0114**	**0.0114**		**0.0105**	**0.0105**	**0.0000**	**20.6934**	**20.6934**	**6.3400e-003**	**0.0000**	**20.8265**

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	5.4000e-004	8.0000e-004	8.2900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4827	1.4827	8.0000e-005	0.0000	1.4843
Total	**5.4000e-004**	**8.0000e-004**	**8.2900e-003**	**2.0000e-005**	**1.6500e-003**	**1.0000e-005**	**1.6600e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.4827**	**1.4827**	**8.0000e-005**	**0.0000**	**1.4843**

3.7 Architectural Coating - 2017

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	4.8405					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589
Total	**4.8438**	**0.0219**	**0.0187**	**3.0000e-005**		**1.7300e-003**	**1.7300e-003**		**1.7300e-003**	**1.7300e-003**	**0.0000**	**2.5533**	**2.5533**	**2.7000e-004**	**0.0000**	**2.5589**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0500e-003	3.0300e-003	0.0315	8.0000e-005	6.2500e-003	5.0000e-005	6.3000e-003	1.6600e-003	5.0000e-005	1.7100e-003	0.0000	5.6341	5.6341	2.9000e-004	0.0000	5.6402
Total	**2.0500e-003**	**3.0300e-003**	**0.0315**	**8.0000e-005**	**6.2500e-003**	**5.0000e-005**	**6.3000e-003**	**1.6600e-003**	**5.0000e-005**	**1.7100e-003**	**0.0000**	**5.6341**	**5.6341**	**2.9000e-004**	**0.0000**	**5.6402**

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	4.8405					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3200e-003	0.0219	0.0187	3.0000e-005		1.7300e-003	1.7300e-003		1.7300e-003	1.7300e-003	0.0000	2.5533	2.5533	2.7000e-004	0.0000	2.5589
Total	**4.8438**	**0.0219**	**0.0187**	**3.0000e-005**		**1.7300e-003**	**1.7300e-003**		**1.7300e-003**	**1.7300e-003**	**0.0000**	**2.5533**	**2.5533**	**2.7000e-004**	**0.0000**	**2.5589**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0500e-003	3.0300e-003	0.0315	8.0000e-005	6.2500e-003	5.0000e-005	6.3000e-003	1.6600e-003	5.0000e-005	1.7100e-003	0.0000	5.6341	5.6341	2.9000e-004	0.0000	5.6402
Total	**2.0500e-003**	**3.0300e-003**	**0.0315**	**8.0000e-005**	**6.2500e-003**	**5.0000e-005**	**6.3000e-003**	**1.6600e-003**	**5.0000e-005**	**1.7100e-003**	**0.0000**	**5.6341**	**5.6341**	**2.9000e-004**	**0.0000**	**5.6402**

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	0.5393	5.9251	7.3224	0.0258	1.2545	0.0970	1.3515	0.3399	0.0893	0.4292	0.0000	2,122.7304	2,122.7304	0.0359	0.0000	2,123.4849
Unmitigated	0.5393	5.9251	7.3224	0.0258	1.2545	0.0970	1.3515	0.3399	0.0893	0.4292	0.0000	2,122.7304	2,122.7304	0.0359	0.0000	2,123.4849

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	517.44	517.44	517.44	3,184,553	3,184,553
Total	517.44	517.44	517.44	3,184,553	3,184,553

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	0.00	17.41	62.00	0.00	38.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.618000	0.000000	0.000000	0.000000	0.064600	0.000000	0.087000	0.230400	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

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	0.0000	702.9092	702.9092	0.0154	3.1800e-003	704.2184
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	702.9092	702.9092	0.0154	3.1800e-003	704.2184
NaturalGas Mitigated	3.5500e-003	0.0323	0.0271	1.9000e-004		2.4600e-003	2.4600e-003		2.4600e-003	2.4600e-003	0.0000	35.1732	35.1732	6.7000e-004	6.4000e-004	35.3872
NaturalGas Unmitigated	3.5500e-003	0.0323	0.0271	1.9000e-004		2.4600e-003	2.4600e-003		2.4600e-003	2.4600e-003	0.0000	35.1732	35.1732	6.7000e-004	6.4000e-004	35.3872

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					
Other Non-Asphalt Surfaces	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
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
Unrefrigerated Warehouse-No	659120	3.5500e-003	0.0323	0.0271	1.9000e-004		2.4600e-003	2.4600e-003		2.4600e-003	2.4600e-003	0.0000	35.1732	35.1732	6.7000e-004	6.4000e-004	35.3872
Total		**3.5500e-003**	**0.0323**	**0.0271**	**1.9000e-004**		**2.4600e-003**	**2.4600e-003**		**2.4600e-003**	**2.4600e-003**	**0.0000**	**35.1732**	**35.1732**	**6.7000e-004**	**6.4000e-004**	**35.3872**

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
Unrefrigerated Warehouse-No	659120	3.5500e-003	0.0323	0.0271	1.9000e-004		2.4600e-003	2.4600e-003		2.4600e-003	2.4600e-003	0.0000	35.1732	35.1732	6.7000e-004	6.4000e-004	35.3872
Other Non-Asphalt Surfaces	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
Total		**3.5500e-003**	**0.0323**	**0.0271**	**1.9000e-004**		**2.4600e-003**	**2.4600e-003**		**2.4600e-003**	**2.4600e-003**	**0.0000**	**35.1732**	**35.1732**	**6.7000e-004**	**6.4000e-004**	**35.3872**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	238813	143.5996	3.1400e-003	6.5000e-004	143.8670
Unrefrigerated Warehouse-No Rail	930160	559.3096	0.0122	2.5300e-003	560.3513
Total		**702.9092**	**0.0154**	**3.1800e-003**	**704.2184**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	238813	143.5996	3.1400e-003	6.5000e-004	143.8670
Unrefrigerated Warehouse-No Rail	930160	559.3096	0.0122	2.5300e-003	560.3513
Total		**702.9092**	**0.0154**	**3.1800e-003**	**704.2184**

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	2.9453	5.0000e-005	5.3800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0103	0.0103	3.0000e-005	0.0000	0.0109
Unmitigated	2.9453	5.0000e-005	5.3800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0103	0.0103	3.0000e-005	0.0000	0.0109

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	0.4841					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4607					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.3800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0103	0.0103	3.0000e-005	0.0000	0.0109
Total	**2.9452**	**5.0000e-005**	**5.3800e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0103**	**0.0103**	**3.0000e-005**	**0.0000**	**0.0109**

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	0.4841					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.4607					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.1000e-004	5.0000e-005	5.3800e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0103	0.0103	3.0000e-005	0.0000	0.0109
Total	**2.9452**	**5.0000e-005**	**5.3800e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0103**	**0.0103**	**3.0000e-005**	**0.0000**	**0.0109**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	597.5735	2.3330	0.0573	664.3347
Unmitigated	597.5735	2.3335	0.0574	664.3708

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	71.225 / 2.59181	597.5735	2.3335	0.0574	664.3708
Total		**597.5735**	**2.3335**	**0.0574**	**664.3708**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	71.225 / 2.59181	597.5735	2.3330	0.0573	664.3347
Total		**597.5735**	**2.3330**	**0.0573**	**664.3347**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	58.7699	3.4732	0.0000	131.7072
Unmitigated	58.7699	3.4732	0.0000	131.7072

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	289.52	58.7699	3.4732	0.0000	131.7072
Total		**58.7699**	**3.4732**	**0.0000**	**131.7072**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	289.52	58.7699	3.4732	0.0000	131.7072
Total		**58.7699**	**3.4732**	**0.0000**	**131.7072**

9.0 Operational Offroad

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

10.0 Vegetation

Center Street Warehouse

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	308.00	1000sqft	7.07	308,000.00	0
Other Non-Asphalt Surfaces	101.59	1000sqft	2.33	101,591.00	0
Parking Lot	6.23	Acre	6.23	271,378.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2018
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Demolition -

Vehicle Trips - Trip Rate Per ITE
Trip % Per SCAQMD Recommendation
Trip Length NCHRP Analysis

Vechicle Emission Factors - Fleet Mix Per SCAQMD Recommendation

Vechicle Emission Factors - Fleet Mix Per SCAQMD Recommendation

Vechicle Emission Factors - Fleet Mix Per SCAQMD Recommendation

Water And Wastewater - Include Landscape Water Demand

Architectural Coating - Use of Low-VOC Paints

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	37.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	37.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD1	0.04	0.06

tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	17.41
tblVehicleTrips	CNW_TTP	41.00	38.00
tblVehicleTrips	CW_TTP	59.00	62.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.59	1.68
tblVehicleTrips	SU_TR	2.59	1.68
tblVehicleTrips	WD_TR	2.59	1.68
tblWater	OutdoorWaterUseRate	0.00	2,591,811.00

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					
2016	6.5627	74.9179	50.4347	0.0917	18.2675	3.5861	21.2078	9.9840	3.2992	12.6892	0.0000	8,515.3096	8,515.3096	1.9472	0.0000	8,556.2004
2017	72.1847	36.6069	45.4250	0.0917	3.8970	1.9479	5.8448	1.0472	1.8263	2.8736	0.0000	8,316.0820	8,316.0820	0.8276	0.0000	8,333.4620
Total	**78.7474**	**111.5248**	**95.8597**	**0.1833**	**22.1644**	**5.5340**	**27.0527**	**11.0313**	**5.1255**	**15.5627**	**0.0000**	**16,831.3916**	**16,831.3916**	**2.7748**	**0.0000**	**16,889.6624**

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					
2016	6.5627	74.9179	50.4347	0.0917	18.2675	3.5861	21.2078	9.9840	3.2992	12.6892	0.0000	8,515.3096	8,515.3096	1.9472	0.0000	8,556.2004
2017	72.1847	36.6069	45.4250	0.0917	3.8970	1.9479	5.8448	1.0472	1.8263	2.8736	0.0000	8,316.0820	8,316.0820	0.8276	0.0000	8,333.4620
Total	**78.7474**	**111.5248**	**95.8597**	**0.1833**	**22.1644**	**5.5340**	**27.0527**	**11.0313**	**5.1255**	**15.5627**	**0.0000**	**16,831.3916**	**16,831.3916**	**2.7748**	**0.0000**	**16,889.6624**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
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**

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	16.1396	4.0000e-004	0.0430	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0963
Energy	0.0195	0.1770	0.1487	1.0600e-003		0.0135	0.0135		0.0135	0.0135		212.4480	212.4480	4.0700e-003	3.8900e-003	213.7410
Mobile	2.9114	30.8680	37.8492	0.1445	7.0155	0.5331	7.5485	1.8976	0.4905	2.3881		13,051.3339	13,051.3339	0.2175		13,055.9003
Total	**19.0705**	**31.0454**	**38.0409**	**0.1455**	**7.0155**	**0.5467**	**7.5621**	**1.8976**	**0.5041**	**2.4017**		**13,263.8729**	**13,263.8729**	**0.2218**	**3.8900e-003**	**13,269.7375**

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	16.1396	4.0000e-004	0.0430	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0963
Energy	0.0195	0.1770	0.1487	1.0600e-003		0.0135	0.0135		0.0135	0.0135		212.4480	212.4480	4.0700e-003	3.8900e-003	213.7410
Mobile	2.9114	30.8680	37.8492	0.1445	7.0155	0.5331	7.5485	1.8976	0.4905	2.3881		13,051.3339	13,051.3339	0.2175		13,055.9003
Total	**19.0705**	**31.0454**	**38.0409**	**0.1455**	**7.0155**	**0.5467**	**7.5621**	**1.8976**	**0.5041**	**2.4017**		**13,263.8729**	**13,263.8729**	**0.2218**	**3.8900e-003**	**13,269.7375**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
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	Demolition	Demolition	1/1/2016	1/28/2016	5	20	
2	Site Preparation	Site Preparation	1/29/2016	2/11/2016	5	10	
3	Grading	Grading	2/12/2016	3/24/2016	5	30	
4	Building Construction	Building Construction	3/25/2016	5/18/2017	5	300	
5	Paving	Paving	5/19/2017	6/15/2017	5	20	
6	Architectural Coating	Architectural Coating	6/16/2017	7/13/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 626,599; Non-Residential Outdoor: 208,866 (Architectural Coating

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	162	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Building Construction	Welders	1	8.00	46	0.45

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	6	15.00	0.00	733.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	286.00	112.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	57.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

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	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**		**2.2921**	**2.2921**		**2.1365**	**2.1365**		**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

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	0.6317	10.1435	7.1313	0.0271	0.6385	0.1569	0.7954	0.1748	0.1443	0.3192		2,726.9299	2,726.9299	0.0196		2,727.3403
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	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003		178.6295
Total	**0.6941**	**10.2216**	**8.1043**	**0.0292**	**0.8061**	**0.1583**	**0.9644**	**0.2193**	**0.1456**	**0.3649**		**2,905.3672**	**2,905.3672**	**0.0287**		**2,905.9698**

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	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**		**2.2921**	**2.2921**		**2.1365**	**2.1365**	**0.0000**	**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

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	0.6317	10.1435	7.1313	0.0271	0.6385	0.1569	0.7954	0.1748	0.1443	0.3192		2,726.9299	2,726.9299	0.0196		2,727.3403
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	0.0624	0.0781	0.9730	2.1200e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		178.4374	178.4374	9.1500e-003		178.6295
Total	**0.6941**	**10.2216**	**8.1043**	**0.0292**	**0.8061**	**0.1583**	**0.9644**	**0.2193**	**0.1456**	**0.3649**		**2,905.3672**	**2,905.3672**	**0.0287**		**2,905.9698**

3.3 Site Preparation - 2016

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**		**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

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	0.0749	0.0937	1.1675	2.5500e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		214.1249	214.1249	0.0110		214.3554
Total	**0.0749**	**0.0937**	**1.1675**	**2.5500e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**214.1249**	**214.1249**	**0.0110**		**214.3554**

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**	**0.0000**	**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

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	0.0000	0.0000	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	0.0749	0.0937	1.1675	2.5500e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		214.1249	214.1249	0.0110		214.3554
Total	**0.0749**	**0.0937**	**1.1675**	**2.5500e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**214.1249**	**214.1249**	**0.0110**		**214.3554**

3.4 Grading - 2016

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**8.6733**	**3.5842**	**12.2576**	**3.5965**	**3.2975**	**6.8940**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

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	0.0833	0.1041	1.2973	2.8300e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		237.9165	237.9165	0.0122		238.1726
Total	**0.0833**	**0.1041**	**1.2973**	**2.8300e-003**	**0.2236**	**1.8700e-003**	**0.2254**	**0.0593**	**1.7200e-003**	**0.0610**		**237.9165**	**237.9165**	**0.0122**		**238.1726**

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**8.6733**	**3.5842**	**12.2576**	**3.5965**	**3.2975**	**6.8940**	**0.0000**	**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

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	0.0000	0.0000	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	0.0833	0.1041	1.2973	2.8300e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		237.9165	237.9165	0.0122		238.1726
Total	**0.0833**	**0.1041**	**1.2973**	**2.8300e-003**	**0.2236**	**1.8700e-003**	**0.2254**	**0.0593**	**1.7200e-003**	**0.0610**		**237.9165**	**237.9165**	**0.0122**		**238.1726**

3.5 Building Construction - 2016

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

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	0.9356	9.7268	11.1715	0.0244	0.7000	0.1579	0.8579	0.1993	0.1452	0.3446		2,443.8170	2,443.8170	0.0175		2,444.1852
Worker	1.1906	1.4891	18.5509	0.0405	3.1968	0.0267	3.2235	0.8478	0.0246	0.8724		3,402.2062	3,402.2062	0.1744		3,405.8688
Total	**2.1262**	**11.2158**	**29.7225**	**0.0649**	**3.8968**	**0.1847**	**4.0814**	**1.0472**	**0.1698**	**1.2170**		**5,846.0232**	**5,846.0232**	**0.1919**		**5,850.0540**

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

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	0.9356	9.7268	11.1715	0.0244	0.7000	0.1579	0.8579	0.1993	0.1452	0.3446		2,443.8170	2,443.8170	0.0175		2,444.1852
Worker	1.1906	1.4891	18.5509	0.0405	3.1968	0.0267	3.2235	0.8478	0.0246	0.8724		3,402.2062	3,402.2062	0.1744		3,405.8688
Total	**2.1262**	**11.2158**	**29.7225**	**0.0649**	**3.8968**	**0.1847**	**4.0814**	**1.0472**	**0.1698**	**1.2170**		**5,846.0232**	**5,846.0232**	**0.1919**		**5,850.0540**

3.5 Building Construction - 2017

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

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	0.8576	8.8566	10.5067	0.0244	0.7002	0.1409	0.8411	0.1994	0.1296	0.3291		2,404.2722	2,404.2722	0.0170		2,404.6282
Worker	1.0704	1.3447	16.7892	0.0405	3.1968	0.0257	3.2225	0.8478	0.0237	0.8715		3,272.0046	3,272.0046	0.1610		3,275.3848
Total	**1.9280**	**10.2013**	**27.2959**	**0.0648**	**3.8970**	**0.1667**	**4.0636**	**1.0472**	**0.1534**	**1.2006**		**5,676.2767**	**5,676.2767**	**0.1779**		**5,680.0130**

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

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	0.8576	8.8566	10.5067	0.0244	0.7002	0.1409	0.8411	0.1994	0.1296	0.3291		2,404.2722	2,404.2722	0.0170		2,404.6282
Worker	1.0704	1.3447	16.7892	0.0405	3.1968	0.0257	3.2225	0.8478	0.0237	0.8715		3,272.0046	3,272.0046	0.1610		3,275.3848
Total	**1.9280**	**10.2013**	**27.2959**	**0.0648**	**3.8970**	**0.1667**	**4.0636**	**1.0472**	**0.1534**	**1.2006**		**5,676.2767**	**5,676.2767**	**0.1779**		**5,680.0130**

3.6 Paving - 2017

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	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.8161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7235**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**		**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

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	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.6086	171.6086	8.4400e-003		171.7859
Total	**0.0561**	**0.0705**	**0.8806**	**2.1200e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**171.6086**	**171.6086**	**8.4400e-003**		**171.7859**

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	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.8161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7235**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**	**0.0000**	**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

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	0.0000	0.0000	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	0.0561	0.0705	0.8806	2.1200e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		171.6086	171.6086	8.4400e-003		171.7859
Total	**0.0561**	**0.0705**	**0.8806**	**2.1200e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**171.6086**	**171.6086**	**8.4400e-003**		**171.7859**

3.7 Architectural Coating - 2017

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	71.6390					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**71.9714**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.2133	0.2680	3.3461	8.0700e-003	0.6371	5.1200e-003	0.6423	0.1690	4.7300e-003	0.1737		652.1128	652.1128	0.0321		652.7865
Total	**0.2133**	**0.2680**	**3.3461**	**8.0700e-003**	**0.6371**	**5.1200e-003**	**0.6423**	**0.1690**	**4.7300e-003**	**0.1737**		**652.1128**	**652.1128**	**0.0321**		**652.7865**

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	71.6390					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**71.9714**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0000	0.0000	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	0.2133	0.2680	3.3461	8.0700e-003	0.6371	5.1200e-003	0.6423	0.1690	4.7300e-003	0.1737		652.1128	652.1128	0.0321		652.7865
Total	**0.2133**	**0.2680**	**3.3461**	**8.0700e-003**	**0.6371**	**5.1200e-003**	**0.6423**	**0.1690**	**4.7300e-003**	**0.1737**		**652.1128**	**652.1128**	**0.0321**		**652.7865**

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	2.9114	30.8680	37.8492	0.1445	7.0155	0.5331	7.5485	1.8976	0.4905	2.3881		13,051.3339	13,051.3339	0.2175		13,055.9003
Unmitigated	2.9114	30.8680	37.8492	0.1445	7.0155	0.5331	7.5485	1.8976	0.4905	2.3881		13,051.3339	13,051.3339	0.2175		13,055.9003

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	517.44	517.44	517.44	3,184,553	3,184,553
Total	517.44	517.44	517.44	3,184,553	3,184,553

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	0.00	17.41	62.00	0.00	38.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.618000	0.000000	0.000000	0.000000	0.064600	0.000000	0.087000	0.230400	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

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	0.0195	0.1770	0.1487	1.0600e-003		0.0135	0.0135		0.0135	0.0135		212.4480	212.4480	4.0700e-003	3.8900e-003	213.7410
NaturalGas Unmitigated	0.0195	0.1770	0.1487	1.0600e-003		0.0135	0.0135		0.0135	0.0135		212.4480	212.4480	4.0700e-003	3.8900e-003	213.7410

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					
Other Non-Asphalt Surfaces	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
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
Unrefrigerated Warehouse-No Rail	1805.81	0.0195	0.1770	0.1487	1.0600e-003		0.0135	0.0135		0.0135	0.0135		212.4480	212.4480	4.0700e-003	3.8900e-003	213.7410
Total		**0.0195**	**0.1770**	**0.1487**	**1.0600e-003**		**0.0135**	**0.0135**		**0.0135**	**0.0135**		**212.4480**	**212.4480**	**4.0700e-003**	**3.8900e-003**	**213.7410**

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
Unrefrigerated Warehouse-No Rail	1.80581	0.0195	0.1770	0.1487	1.0600e-003		0.0135	0.0135		0.0135	0.0135		212.4480	212.4480	4.0700e-003	3.8900e-003	213.7410
Other Non-Asphalt Surfaces	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
Total		**0.0195**	**0.1770**	**0.1487**	**1.0600e-003**		**0.0135**	**0.0135**		**0.0135**	**0.0135**		**212.4480**	**212.4480**	**4.0700e-003**	**3.8900e-003**	**213.7410**

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	16.1396	4.0000e-004	0.0430	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0963
Unmitigated	16.1396	4.0000e-004	0.0430	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0963

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	2.6523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.4832					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.1100e-003	4.0000e-004	0.0430	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0963
Total	**16.1396**	**4.0000e-004**	**0.0430**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0910**	**0.0910**	**2.5000e-004**		**0.0963**

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	2.6523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.4832					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.1100e-003	4.0000e-004	0.0430	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0963
Total	**16.1396**	**4.0000e-004**	**0.0430**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0910**	**0.0910**	**2.5000e-004**		**0.0963**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Center Street Warehouse

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	308.00	1000sqft	7.07	308,000.00	0
Other Non-Asphalt Surfaces	101.59	1000sqft	2.33	101,591.00	0
Parking Lot	6.23	Acre	6.23	271,378.80	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2018
Utility Company	Riverside Public Utilities				
CO2 Intensity (lb/MWhr)	1325.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Demolition -

Vehicle Trips - Trip Rate Per ITE
Trip % Per SCAQMD Recommendation
Trip Length NCHRP Analysis

Vechicle Emission Factors - Fleet Mix Per SCAQMD Recommendation

Vechicle Emission Factors - Fleet Mix Per SCAQMD Recommendation

Vechicle Emission Factors - Fleet Mix Per SCAQMD Recommendation

Water And Wastewater - Include Landscape Water Demand

Architectural Coating - Use of Low-VOC Paints

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	37.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	37.00
tblProjectCharacteristics	OperationalYear	2014	2018
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	HHD	0.03	0.23
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDA	0.51	0.62
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT1	0.06	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LDT2	0.18	0.00
tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD1	0.04	0.06

tblVehicleEF	LHD1	0.04	0.06
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	LHD2	6.6470e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MCY	4.3620e-003	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MDV	0.14	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MH	2.1170e-003	0.00
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	MHD	0.02	0.09
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	OBUS	1.9400e-003	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	SBUS	5.8800e-004	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleEF	UBUS	2.5020e-003	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CNW_TL	6.90	17.41
tblVehicleTrips	CNW_TTP	41.00	38.00
tblVehicleTrips	CW_TTP	59.00	62.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.59	1.68
tblVehicleTrips	SU_TR	2.59	1.68
tblVehicleTrips	WD_TR	2.59	1.68
tblWater	OutdoorWaterUseRate	0.00	2,591,811.00

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					
2016	6.5646	74.9281	50.3334	0.0890	18.2675	3.5861	21.2078	9.9840	3.2992	12.6892	0.0000	8,283.5123	8,283.5123	1.9472	0.0000	8,324.4032
2017	72.1889	36.9574	46.2804	0.0889	3.8970	1.9493	5.8462	1.0472	1.8276	2.8748	0.0000	8,092.2198	8,092.2198	0.8282	0.0000	8,109.6109
Total	**78.7535**	**111.8855**	**96.6138**	**0.1779**	**22.1644**	**5.5354**	**27.0540**	**11.0313**	**5.1268**	**15.5640**	**0.0000**	**16,375.7322**	**16,375.7322**	**2.7753**	**0.0000**	**16,434.0141**

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					
2016	6.5646	74.9281	50.3334	0.0890	18.2675	3.5861	21.2078	9.9840	3.2992	12.6892	0.0000	8,283.5123	8,283.5123	1.9472	0.0000	8,324.4032
2017	72.1889	36.9574	46.2804	0.0889	3.8970	1.9493	5.8462	1.0472	1.8276	2.8748	0.0000	8,092.2198	8,092.2198	0.8282	0.0000	8,109.6109
Total	**78.7535**	**111.8855**	**96.6138**	**0.1779**	**22.1644**	**5.5354**	**27.0540**	**11.0313**	**5.1268**	**15.5640**	**0.0000**	**16,375.7322**	**16,375.7322**	**2.7753**	**0.0000**	**16,434.0141**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
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**

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	16.1396	4.0000e-004	0.0430	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0963
Energy	0.0195	0.1770	0.1487	1.0600e-003		0.0135	0.0135		0.0135	0.0135		212.4480	212.4480	4.0700e-003	3.8900e-003	213.7410
Mobile	3.0246	32.0118	40.5422	0.1413	7.0155	0.5347	7.5502	1.8976	0.4920	2.3896		12,803.3647	12,803.3647	0.2184		12,807.9519
Total	**19.1837**	**32.1892**	**40.7339**	**0.1423**	**7.0155**	**0.5483**	**7.5638**	**1.8976**	**0.5056**	**2.4032**		**13,015.9038**	**13,015.9038**	**0.2228**	**3.8900e-003**	**13,021.7891**

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	16.1396	4.0000e-004	0.0430	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0963
Energy	0.0195	0.1770	0.1487	1.0600e-003		0.0135	0.0135		0.0135	0.0135		212.4480	212.4480	4.0700e-003	3.8900e-003	213.7410
Mobile	3.0246	32.0118	40.5422	0.1413	7.0155	0.5347	7.5502	1.8976	0.4920	2.3896		12,803.3647	12,803.3647	0.2184		12,807.9519
Total	**19.1837**	**32.1892**	**40.7339**	**0.1423**	**7.0155**	**0.5483**	**7.5638**	**1.8976**	**0.5056**	**2.4032**		**13,015.9038**	**13,015.9038**	**0.2228**	**3.8900e-003**	**13,021.7891**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
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	Demolition	Demolition	1/1/2016	1/28/2016	5	20	
2	Site Preparation	Site Preparation	1/29/2016	2/11/2016	5	10	
3	Grading	Grading	2/12/2016	3/24/2016	5	30	
4	Building Construction	Building Construction	3/25/2016	5/18/2017	5	300	
5	Paving	Paving	5/19/2017	6/15/2017	5	20	
6	Architectural Coating	Architectural Coating	6/16/2017	7/13/2017	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 626,599; Non-Residential Outdoor: 208,866 (Architectural Coating

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	162	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	162	0.38
Building Construction	Cranes	1	7.00	226	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	125	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	255	0.40
Grading	Rubber Tired Dozers	1	8.00	255	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	174	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	130	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	255	0.40
Grading	Scrapers	2	8.00	361	0.48
Building Construction	Welders	1	8.00	46	0.45

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	6	15.00	0.00	733.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	286.00	112.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	57.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2016

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	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365		4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**		**2.2921**	**2.2921**		**2.1365**	**2.1365**		**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

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	0.6671	10.5109	8.1707	0.0270	0.6385	0.1573	0.7957	0.1748	0.1447	0.3195		2,720.4537	2,720.4537	0.0198		2,720.8697
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	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003		167.5464
Total	**0.7309**	**10.5966**	**9.0677**	**0.0290**	**0.8061**	**0.1587**	**0.9648**	**0.2193**	**0.1460**	**0.3652**		**2,887.8080**	**2,887.8080**	**0.0290**		**2,888.4160**

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	4.2876	45.6559	35.0303	0.0399		2.2921	2.2921		2.1365	2.1365	0.0000	4,089.2841	4,089.2841	1.1121		4,112.6374
Total	**4.2876**	**45.6559**	**35.0303**	**0.0399**		**2.2921**	**2.2921**		**2.1365**	**2.1365**	**0.0000**	**4,089.2841**	**4,089.2841**	**1.1121**		**4,112.6374**

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	0.6671	10.5109	8.1707	0.0270	0.6385	0.1573	0.7957	0.1748	0.1447	0.3195		2,720.4537	2,720.4537	0.0198		2,720.8697
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	0.0638	0.0858	0.8970	1.9900e-003	0.1677	1.4000e-003	0.1691	0.0445	1.2900e-003	0.0458		167.3543	167.3543	9.1500e-003		167.5464
Total	**0.7309**	**10.5966**	**9.0677**	**0.0290**	**0.8061**	**0.1587**	**0.9648**	**0.2193**	**0.1460**	**0.3652**		**2,887.8080**	**2,887.8080**	**0.0290**		**2,888.4160**

3.3 Site Preparation - 2016

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036		4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**		**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

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	0.0766	0.1029	1.0764	2.3900e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		200.8251	200.8251	0.0110		201.0556
Total	**0.0766**	**0.1029**	**1.0764**	**2.3900e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**200.8251**	**200.8251**	**0.0110**		**201.0556**

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	5.0771	54.6323	41.1053	0.0391		2.9387	2.9387		2.7036	2.7036	0.0000	4,065.0053	4,065.0053	1.2262		4,090.7544
Total	**5.0771**	**54.6323**	**41.1053**	**0.0391**	**18.0663**	**2.9387**	**21.0049**	**9.9307**	**2.7036**	**12.6343**	**0.0000**	**4,065.0053**	**4,065.0053**	**1.2262**		**4,090.7544**

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	0.0000	0.0000	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	0.0766	0.1029	1.0764	2.3900e-003	0.2012	1.6800e-003	0.2029	0.0534	1.5500e-003	0.0549		200.8251	200.8251	0.0110		201.0556
Total	**0.0766**	**0.1029**	**1.0764**	**2.3900e-003**	**0.2012**	**1.6800e-003**	**0.2029**	**0.0534**	**1.5500e-003**	**0.0549**		**200.8251**	**200.8251**	**0.0110**		**201.0556**

3.4 Grading - 2016

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975		6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**8.6733**	**3.5842**	**12.2576**	**3.5965**	**3.2975**	**6.8940**		**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

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	0.0851	0.1144	1.1960	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1390	223.1390	0.0122		223.3952
Total	**0.0851**	**0.1144**	**1.1960**	**2.6500e-003**	**0.2236**	**1.8700e-003**	**0.2254**	**0.0593**	**1.7200e-003**	**0.0610**		**223.1390**	**223.1390**	**0.0122**		**223.3952**

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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	6.4795	74.8137	49.1374	0.0617		3.5842	3.5842		3.2975	3.2975	0.0000	6,414.9807	6,414.9807	1.9350		6,455.6154
Total	**6.4795**	**74.8137**	**49.1374**	**0.0617**	**8.6733**	**3.5842**	**12.2576**	**3.5965**	**3.2975**	**6.8940**	**0.0000**	**6,414.9807**	**6,414.9807**	**1.9350**		**6,455.6154**

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	0.0000	0.0000	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	0.0851	0.1144	1.1960	2.6500e-003	0.2236	1.8700e-003	0.2254	0.0593	1.7200e-003	0.0610		223.1390	223.1390	0.0122		223.3952
Total	**0.0851**	**0.1144**	**1.1960**	**2.6500e-003**	**0.2236**	**1.8700e-003**	**0.2254**	**0.0593**	**1.7200e-003**	**0.0610**		**223.1390**	**223.1390**	**0.0122**		**223.3952**

3.5 Building Construction - 2016

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485		2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**		**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

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	1.0255	9.9724	13.4090	0.0242	0.7000	0.1596	0.8595	0.1993	0.1467	0.3461		2,423.3378	2,423.3378	0.0181		2,423.7169
Worker	1.2172	1.6356	17.1029	0.0380	3.1968	0.0267	3.2235	0.8478	0.0246	0.8724		3,190.8882	3,190.8882	0.1744		3,194.5508
Total	**2.2427**	**11.6081**	**30.5118**	**0.0622**	**3.8968**	**0.1863**	**4.0831**	**1.0472**	**0.1713**	**1.2185**		**5,614.2259**	**5,614.2259**	**0.1925**		**5,618.2677**

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	3.4062	28.5063	18.5066	0.0268		1.9674	1.9674		1.8485	1.8485	0.0000	2,669.2864	2,669.2864	0.6620		2,683.1890
Total	**3.4062**	**28.5063**	**18.5066**	**0.0268**		**1.9674**	**1.9674**		**1.8485**	**1.8485**	**0.0000**	**2,669.2864**	**2,669.2864**	**0.6620**		**2,683.1890**

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	1.0255	9.9724	13.4090	0.0242	0.7000	0.1596	0.8595	0.1993	0.1467	0.3461		2,423.3378	2,423.3378	0.0181		2,423.7169
Worker	1.2172	1.6356	17.1029	0.0380	3.1968	0.0267	3.2235	0.8478	0.0246	0.8724		3,190.8882	3,190.8882	0.1744		3,194.5508
Total	**2.2427**	**11.6081**	**30.5118**	**0.0622**	**3.8968**	**0.1863**	**4.0831**	**1.0472**	**0.1713**	**1.2185**		**5,614.2259**	**5,614.2259**	**0.1925**		**5,618.2677**

3.5 Building Construction - 2017

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730		2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**		**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

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	0.9367	9.0751	12.7296	0.0242	0.7002	0.1423	0.8425	0.1994	0.1309	0.3303		2,384.0753	2,384.0753	0.0175		2,384.4425
Worker	1.0918	1.4767	15.4217	0.0379	3.1968	0.0257	3.2225	0.8478	0.0237	0.8715		3,068.3392	3,068.3392	0.1610		3,071.7194
Total	**2.0285**	**10.5518**	**28.1513**	**0.0621**	**3.8970**	**0.1680**	**4.0650**	**1.0472**	**0.1546**	**1.2019**		**5,452.4145**	**5,452.4145**	**0.1784**		**5,456.1619**

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	3.1024	26.4057	18.1291	0.0268		1.7812	1.7812		1.6730	1.6730	0.0000	2,639.8053	2,639.8053	0.6497		2,653.4490
Total	**3.1024**	**26.4057**	**18.1291**	**0.0268**		**1.7812**	**1.7812**		**1.6730**	**1.6730**	**0.0000**	**2,639.8053**	**2,639.8053**	**0.6497**		**2,653.4490**

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	0.9367	9.0751	12.7296	0.0242	0.7002	0.1423	0.8425	0.1994	0.1309	0.3303		2,384.0753	2,384.0753	0.0175		2,384.4425
Worker	1.0918	1.4767	15.4217	0.0379	3.1968	0.0257	3.2225	0.8478	0.0237	0.8715		3,068.3392	3,068.3392	0.1610		3,071.7194
Total	**2.0285**	**10.5518**	**28.1513**	**0.0621**	**3.8970**	**0.1680**	**4.0650**	**1.0472**	**0.1546**	**1.2019**		**5,452.4145**	**5,452.4145**	**0.1784**		**5,456.1619**

3.6 Paving - 2017

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	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473		2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.8161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7235**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**		**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

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	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9269	160.9269	8.4400e-003		161.1042
Total	**0.0573**	**0.0775**	**0.8088**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**160.9269**	**160.9269**	**8.4400e-003**		**161.1042**

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	1.9074	20.2964	14.7270	0.0223		1.1384	1.1384		1.0473	1.0473	0.0000	2,281.0588	2,281.0588	0.6989		2,295.7360
Paving	0.8161					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.7235**	**20.2964**	**14.7270**	**0.0223**		**1.1384**	**1.1384**		**1.0473**	**1.0473**	**0.0000**	**2,281.0588**	**2,281.0588**	**0.6989**		**2,295.7360**

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	0.0000	0.0000	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	0.0573	0.0775	0.8088	1.9900e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2400e-003	0.0457		160.9269	160.9269	8.4400e-003		161.1042
Total	**0.0573**	**0.0775**	**0.8088**	**1.9900e-003**	**0.1677**	**1.3500e-003**	**0.1690**	**0.0445**	**1.2400e-003**	**0.0457**		**160.9269**	**160.9269**	**8.4400e-003**		**161.1042**

3.7 Architectural Coating - 2017

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	71.6390					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	**71.9714**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**		**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.2176	0.2943	3.0736	7.5600e-003	0.6371	5.1200e-003	0.6423	0.1690	4.7300e-003	0.1737		611.5221	611.5221	0.0321		612.1958
Total	**0.2176**	**0.2943**	**3.0736**	**7.5600e-003**	**0.6371**	**5.1200e-003**	**0.6423**	**0.1690**	**4.7300e-003**	**0.1737**		**611.5221**	**611.5221**	**0.0321**		**612.1958**

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	71.6390					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733	0.0000	281.4481	281.4481	0.0297		282.0721
Total	**71.9714**	**2.1850**	**1.8681**	**2.9700e-003**		**0.1733**	**0.1733**		**0.1733**	**0.1733**	**0.0000**	**281.4481**	**281.4481**	**0.0297**		**282.0721**

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	0.0000	0.0000	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	0.2176	0.2943	3.0736	7.5600e-003	0.6371	5.1200e-003	0.6423	0.1690	4.7300e-003	0.1737		611.5221	611.5221	0.0321		612.1958
Total	**0.2176**	**0.2943**	**3.0736**	**7.5600e-003**	**0.6371**	**5.1200e-003**	**0.6423**	**0.1690**	**4.7300e-003**	**0.1737**		**611.5221**	**611.5221**	**0.0321**		**612.1958**

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	3.0246	32.0118	40.5422	0.1413	7.0155	0.5347	7.5502	1.8976	0.4920	2.3896		12,803.3647	12,803.3647	0.2184		12,807.9519
Unmitigated	3.0246	32.0118	40.5422	0.1413	7.0155	0.5347	7.5502	1.8976	0.4920	2.3896		12,803.3647	12,803.3647	0.2184		12,807.9519

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	517.44	517.44	517.44	3,184,553	3,184,553
Total	517.44	517.44	517.44	3,184,553	3,184,553

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	0.00	17.41	62.00	0.00	38.00	100	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.618000	0.000000	0.000000	0.000000	0.064600	0.000000	0.087000	0.230400	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

4.4 Fleet Mix

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	0.0195	0.1770	0.1487	1.0600e-003		0.0135	0.0135		0.0135	0.0135		212.4480	212.4480	4.0700e-003	3.8900e-003	213.7410
NaturalGas Unmitigated	0.0195	0.1770	0.1487	1.0600e-003		0.0135	0.0135		0.0135	0.0135		212.4480	212.4480	4.0700e-003	3.8900e-003	213.7410

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					
Other Non-Asphalt Surfaces	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
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
Unrefrigerated Warehouse-No Rail	1805.81	0.0195	0.1770	0.1487	1.0600e-003		0.0135	0.0135		0.0135	0.0135		212.4480	212.4480	4.0700e-003	3.8900e-003	213.7410
Total		**0.0195**	**0.1770**	**0.1487**	**1.0600e-003**		**0.0135**	**0.0135**		**0.0135**	**0.0135**		**212.4480**	**212.4480**	**4.0700e-003**	**3.8900e-003**	**213.7410**

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
Unrefrigerated Warehouse-No Rail	1.80581	0.0195	0.1770	0.1487	1.0600e-003		0.0135	0.0135		0.0135	0.0135		212.4480	212.4480	4.0700e-003	3.8900e-003	213.7410
Other Non-Asphalt Surfaces	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
Total		**0.0195**	**0.1770**	**0.1487**	**1.0600e-003**		**0.0135**	**0.0135**		**0.0135**	**0.0135**		**212.4480**	**212.4480**	**4.0700e-003**	**3.8900e-003**	**213.7410**

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	16.1396	4.0000e-004	0.0430	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0963
Unmitigated	16.1396	4.0000e-004	0.0430	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0963

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	2.6523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.4832					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.1100e-003	4.0000e-004	0.0430	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0963
Total	**16.1396**	**4.0000e-004**	**0.0430**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0910**	**0.0910**	**2.5000e-004**		**0.0963**

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	2.6523					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.4832					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.1100e-003	4.0000e-004	0.0430	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0910	0.0910	2.5000e-004		0.0963
Total	**16.1396**	**4.0000e-004**	**0.0430**	**0.0000**		**1.5000e-004**	**1.5000e-004**		**1.5000e-004**	**1.5000e-004**		**0.0910**	**0.0910**	**2.5000e-004**		**0.0963**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Attachment B:
Final Hydrology Study

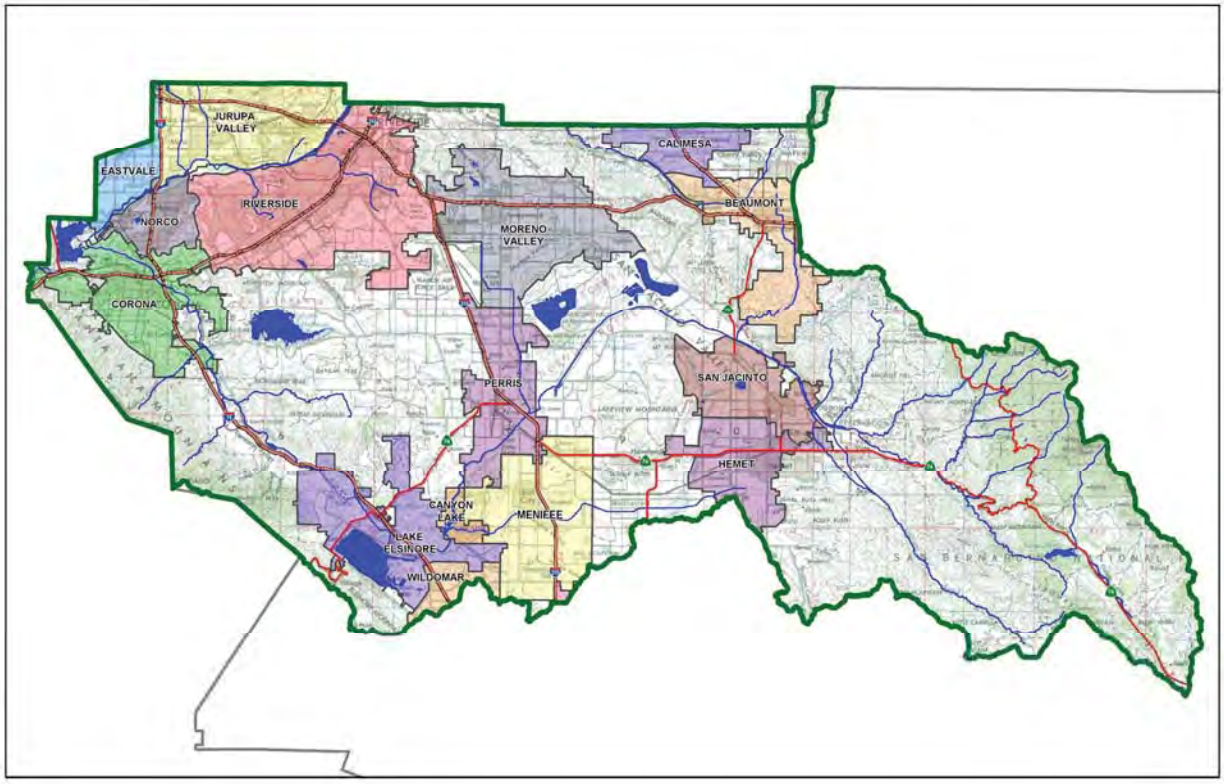
Project Specific Water Quality Management Plan

*A Template for Projects located within the **Santa Ana Watershed** Region of Riverside County*

Project Title: Center Street Industrial Block

Public Works No: _____

Design Review/Case No: P14-1033



☒ **Preliminary**
☐ **Final**

Original Date Prepared: October 9, 2014

Revision Date(s): N/A

Prepared for Compliance with
Regional Board Order No. **R8-2010-0033**

Contact Information:

Prepared for: Transition Properties
PO Box 1010 Blue Jay, CA 92317
ATTN: Art Day

Prepared by: Psomas
1500 Iowa Avenue, Suite 210
Riverside, CA 92507
Attn: Andrew Woodard, PE

OWNER'S CERTIFICATION

This Project-Specific Water Quality Management Plan (WQMP) has been prepared for Transition Properties by Psomas. for the Center Street Industrial Block project.

This WQMP is intended to comply with the requirements of the City of Riverside for design review of the proposed 308,000 SF industrial complex, Planning Case No. P14-1033 which includes the requirement for the preparation and implementation of a Project-Specific WQMP.

The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation and funding of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. In addition, the property owner accepts responsibility for interim operation and maintenance of Stormwater BMPs until such time as this responsibility is formally transferred to a subsequent owner. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity. The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under the City of Riverside Water Quality Ordinance (Municipal Code Section 14.12.315).

"I, the undersigned, certify under penalty of law that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

Owner's Signature	Date
Owner's Printed Name	Owner's Title/Position

PREPARER'S CERTIFICATION

"The selection, sizing and design of stormwater treatment and other stormwater quality and quantity control measures in this plan meet the requirements of Regional Water Quality Control Board Order No. **R8-2010-0033** and any subsequent amendments thereto."

Preparer's Signature	Date
Andrew Woodard, PE	Project Engineer
Preparer's Printed Name	Preparer's Title/Position

Preparer's Licensure:

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List of Tables

List of Appendices

Section A: Project and Site Information

This project is a proposal to build a new industrial building and adjoining parking lot on APNs 246-070-002, 017, 246-040-026, and 027. Stormwater from the site will be treated by an infiltration basin at the Southeast corner of the site.

PROJECT INFORMATION	
Type of Project:	Commercial warehouse
Planning Area:	Ward 1, City of Riverside, County of Riverside
Community Name:	Northside
Development Name:	Center Street Industrial Block
PROJECT LOCATION	
Latitude & Longitude (DMS): 34° 01' 07"N, 117° 21' 18"W	
Project Watershed and Sub-Watershed: Santa Ana; Santa Ana River, Reach 3	
APN(s): 246-070-002, 017, 246-040-026, and 027	
Map Book and Page No.: Book 1, Page 20 of Maps, Riverside County Records	
PROJECT CHARACTERISTICS	
Proposed or Potential Land Use(s)	Industrial Warehouse
Proposed or Potential SIC Code(s)	4225
Area of Impervious Project Footprint (SF)	582,839 SF
Total Area of proposed Impervious Surfaces within the Project Limits (SF)/or Replacement	582,839 SF
Does the project consist of offsite road improvements?	☒ Y ☐ N
Does the project propose to construct unpaved roads?	☐ Y ☒ N
Is the project part of a larger common plan of development (phased project)?	☐ Y ☒ N
EXISTING SITE CHARACTERISTICS	
Total area of existing Impervious Surfaces within the project limits (SF)	0 SF
Is the project located within any MSHCP Criteria Cell?	☐ Y ☒ N
If so, identify the Cell number:	N/A
Are there any natural hydrologic features on the project site?	☐ Y ☒ N
Is a Geotechnical Report attached?	☒ Y ☐ N
If no Geotech. Report, list the NRCS soils type(s) present on the site (A, B, C and/or D)	N/A
What is the Water Quality Design Storm Depth for the project?	0.65 in

A.1 Maps and Site Plans

Appendix 1 includes a map of the local vicinity and existing site. In addition, WQMP Site Plan, located in Appendix 1, includes the following:

- Drainage Management Areas
- Proposed Structural BMPs
- Drainage Path
- Drainage Infrastructure, Inlets, Overflows
- Source Control BMPs
- Buildings, Roof Lines, Downspouts
- Impervious Surfaces
- Standard Labeling

A.2 Receiving Waters

In order of upstream to downstream, the receiving waters the project site is tributary to are as follows:

Table A.1 Identification of Receiving Waters

Receiving Waters	EPA Approved 303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use
Lake Evans (801.27)	**None**	**REC1, REC2, WARM, COLD, WILD**	**Not a water body classified as RARE**
Santa Ana River, Reach 3 (801.21)	**Pathogens**	**AGR, GWR, REC1, REC2, WILD, WARM, RARE**	**2.5 Miles**
Prado Basin Management Zone (801.11)	None	REC1, REC2, WARM, WILD, RARE	19 Miles
Santa Ana River, Reach 2 (801.11)	None	AGR, GWR, REC1, REC2, WILD, WARM, RARE	21 Miles
Santa Ana River, Reach 1 (801.11)	None	REC1, REC2, WILD, WARM	Not a water body classified as RARE
Tidal Prism of Santa Ana River (to within 1000' of Victoria Street) and Newport Slough (801.11)	None	REC1, REC2, COMM, WILD, RARE, MAR	45 Miles
Pacific Ocean Nearshore Zone (801.11)	None	IND, NAV, REC1, REC2, COMM, WILD, RARE, SPWN, MAR, SHEL	49 Miles
Pacific Ocean Offshore Zone (---)	None	IND, NAV, REC1, REC2, COMM, WILD, RARE, SPWN, MAR	52 Miles

Note: Proximate receiving waters are identified in bold.

See Receiving Waters Diagram in Appendix 1

A.3 Additional Permits/Approvals required for the Project:

Table A.2 Other Applicable Permits

Agency	Permit Required	
State Department of Fish and Game, 1602 Streambed Alteration Agreement	☐ Y	☒ N
State Water Resources Control Board, Clean Water Act (CWA) Section 401 Water Quality Cert.	☐ Y	☒ N
US Army Corps of Engineers, CWA Section 404 Permit	☐ Y	☒ N
US Fish and Wildlife, Endangered Species Act Section 7 Biological Opinion	☐ Y	☒ N
Statewide Construction General Permit Coverage	☒ Y	☐ N
Statewide Industrial General Permit Coverage	☐ Y	☒ N
Western Riverside MSHCP Consistency Approval (e.g., JPR, DBESP)	☐ Y	☒ N
Other *(please list in the space below as required)*		
City of Riverside Conditional Use Permit	☐ Y	☒ N
City of Riverside Design Review	☒ Y	☐ N
City of Riverside Building Permit	☒ Y	☐ N
City of Riverside Grading Permit	☒ Y	☐ N
City of Riverside Construction Permit	☒ Y	☐ N

Section B: Optimize Site Utilization (LID Principles)

Site Optimization

Does the project identify and preserve existing drainage patterns? If so, how? If not, why?

Yes, this site strives to keep the drainage proceeding to the south westerly corner of the site, which is where the historical flows have always gone. In addition, there are historic tributary flows that are entering this site from the north westerly corner of the site in a concentrated manner. The existing drainage pattern included ponding on Center Street. The proposed site will included a 20 foot wide drainage easement to carry the offsite flows through the site and outlet into Placentia Lane.

Does the project identify and protect existing vegetation? If so, how? If not, why?

No, the existing site is in a rural area and what little vegetation that is place does not lend itself to the development standards. New landscaping is proposed and will be integrated into the proposed parking lot and street adjacent landscaped areas.

Does the project identify and preserve natural infiltration capacity? If so, how? If not, why?

Yes, the current infiltration capacity is comprised of the existing soils natural infiltration ability. The proposed site layout includes an infiltration basin that will serve to mimic and exceed the existing infiltration capacity.

Does the project identify and minimize impervious area? If so, how? If not, why?

Yes, landscaped areas are distributed equally throughout the parking lot and the south easterly corner of the site will serve as a landscaped infiltration basin.

Does the project identify and disperse runoff to adjacent pervious areas? If so, how? If not, why?

Yes, the proposed building will have roof drains that are directed over proposed landscaped areas before being routed to the landscaped infiltration basin.

Section C: Delineate Drainage Management Areas (DMAs)

Table C.1 DMA Classifications

DMA Name or ID	Surface Type(s)	Area (Sq. Ft.)	DMA Type
1-A	Concrete	5917	D
1-B	Landscape	51098	D
1-C	Roofs	303591	D
1-D	Asphalt	194632	D
1-E	Landscaped Infiltration Basin	20210	D
2-B	Natural Soil (C)	11745	A
3-A	Concrete	5355	D
3-B	Landscape	4308	D
3-D	Roofs	22992	D
3-E	Infiltration Trench	803	D
4-A	Concrete	7419	D
4-B	Landscape	9418	D
4-D	Roofs	30720	D
4-E	Infiltration Trench	925	D
5-F	Landscape	11647	A

Table C.2 Type 'A', Self-Treating Areas

DMA Name or ID	Area (Sq. Ft.)	Stabilization Type	Irrigation Type (if any)
2-B	11745	Natural Channel with Depressed Overflow Outlet	N/A
3-F	11647	Ornamental Landscape	Per approved Landscape Architects Plan

Table C.3 Type 'B', Self-Retaining Areas

Self-Retaining Area				**Type 'C' DMAs that are draining to the Self-Retaining Area**		
DMA Name/ ID	**Post-project surface type**	**Area (square feet)** [A]	**Storm Depth (inches)** [B]	**DMA Name / ID**	**[C] from Table C.4 =** [C]	**Required Retention Depth (inches)** [D]
1-E	Landscaped Infiltration Basin	20210	0.65	1-Total	455337.1	15.3
3-E	Infiltration Trench	803	0.65	3-Total	25761.5	21.5

Self-Retaining Area				Type 'C' DMAs that are draining to the Self-Retaining Area		
DMA Name/ ID	Post-project surface type	Area (square feet) [A]	Storm Depth (inches) [B]	DMA Name / ID	[C] from Table C.4 = [C]	Required Retention Depth (inches) [D]
4-E	Infiltration Trench	925	0.65	4-Total	35060.2	25.3

$$[D] = [B] + \frac{[B] \cdot [C]}{[A]}$$

Table C.4 Type 'C', Areas that Drain to Self-Retaining Areas

DMA					Receiving Self-Retaining DMA		
DMA Name/ ID	Area (square feet) [A]	Post-project surface type	Runoff factor [B]	Product [C] = [A] x [B]	DMA name /ID	Area (square feet) [D]	Ratio [C]/[D]
1-A	5917	Concrete	0.89	5278	1-E	20210	22.5:1*
1-B	51098	Landscape	0.11	5644.2			
1-C	303591	Roofs	0.89	270803.2			
1-D	194632	Asphalt	0.89	173611.7			
Total	**555238**	---	---	**455337.1**			
3-A	5355	Concrete	0.89	4776.7	3-E	803	32:1*
3-B	4308	Landscape	0.11	475.9			
3-D	22992	Asphalt	0.89	20508.9			
3-Total	**32655**	---	---	**25761.5**			

DMA					Receiving Self-Retaining DMA		
DMA Name/ ID	Area (square feet)	Post-project surface type	Runoff factor	Product	DMA name /ID	Area (square feet)	Ratio
	[A]		[B]	[C] = [A] x [B]		[D]	[C]/[D]
4-A	7419	Concrete	0.89	6617.7	4-E	925	37.9:1*
4-B	9418	Landscape	0.11	1040.3			
4-D	30720	Asphalt	0.89	27402.2			
4-Total	**47557**	---	---	**35060.2**			

*Does not meet 2:1 Criteria, Area will drain to Type 'D' BMP.

Table C.5 Type 'D', Areas Draining to BMPs

DMA Name or ID	BMP Name or ID
1-E	1-All
3-E	2-All
4-E	3-All

Section D: Implement LID BMPs

D.1 Infiltration Applicability

Is there an approved downstream 'Highest and Best Use' for stormwater runoff (ref: Chapter 2.4.4 of the WQMP Guidance Document)? ☐ Y ☒ N

Geotechnical Report

A Geotechnical Report is required by the City of Riverside to confirm present and past site characteristics that may affect the use of Infiltration BMPs, see Appendix 3.

Is this project classified as a small project consistent with the requirements of Chapter 2 of the WQMP Guidance Document? ☐ Y ☒ N

Infiltration Feasibility

Table D.1 Infiltration Feasibility

Does the project site…	YES	NO
…have any DMAs with a seasonal high groundwater mark shallower than 10 feet?		X
If Yes, list affected DMAs:		
…have any DMAs located within 100 feet of a water supply well?		X
If Yes, list affected DMAs:		
…have any areas identified by the geotechnical report as posing a public safety risk where infiltration of stormwater could have a negative impact?		X
If Yes, list affected DMAs:		
…have measured in-situ infiltration rates of less than 1.6 inches / hour?		X
If Yes, list affected DMAs:		
…have significant cut and/or fill conditions that would preclude in-situ testing of infiltration rates at the final infiltration surface?		X
If Yes, list affected DMAs:		
…geotechnical report identify other site-specific factors that would preclude effective and safe infiltration?		X
Describe here:		

D.2 Harvest and Use Assessment

The following conditions apply*:*

☐ Reclaimed water will be used for the non-potable water demands for the project.

☐ Downstream water rights may be impacted by Harvest and Use as approved by the Regional Board (verified with the City of Riverside).

☐ The Design Capture Volume will be addressed using Infiltration Only BMPs. (Harvest and Use BMPs are still encouraged, but are not required as the Design Capture Volume will be infiltrated or evapotranspired).

☒ None of the above.

Harvest and Use BMPs need not be assessed for the site.

D.3 Bioretention and Biotreatment Assessment

Other LID Bioretention and Biotreatment BMPs as described in Chapter 2.4.7 of the WQMP Guidance Document are feasible on nearly all development sites with sufficient advance planning.

For the project, the following applies:

☐ LID Bioretention/Biotreatment BMPs will be used for some or all DMAs of the project as noted below in Section D.4

☐ A site-specific analysis demonstrating the technical infeasibility of all LID BMPs has been performed and is included in Appendix 5.

☒ None of the above.

D.4 Feasibility Assessment Summaries

Table D.2 LID Prioritization Summary Matrix

DMA Name/ID	LID BMP Hierarchy				No LID (Alternative Compliance)
	1. Infiltration	2. Harvest and use	3. Bioretention	4. Biotreatment	
1-A	☒	☐	☐	☐	☐
1-B	☒	☐	☐	☐	☐
1-C	☒	☐	☐	☐	☐
1-D	☒	☐	☐	☐	☐
1-E	☒	☐	☐	☐	☐
2-B	☒	☐	☐	☐	☐

D.5 LID BMP Sizing

Table D.3 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*DMA 1*		
	[A]		[B]	[C]	[A] x [C]			
1-A	5917	Concrete	*1*	*0.89*	5278	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
1-B	51098	Landscape	*0.1*	*0.11*	5644.2			
1-C	303591	Roofs	*1*	*0.89*	270803.2			
1-D	194632	Asphalt	*1*	*0.89*	173611.7			
1-E	20210	Landscaped Infiltration Basin	*0.1*	*0.11*	*2232.4*			
	$A_T = \Sigma[A]$				$\Sigma = [D]$	[E]	$[F] = \frac{[D]x[E]}{12}$	[G]
	575448				457569.5	0.65	24785	101050

[B], [C] are obtained from Section 2.3.1 of the WQMP Guidance Document
[E] is obtained from Exhibit A of the WQMP Guidance Document
[G] is obtained from LID BMP design procedure sheet, placed in Appendix 6

Table D.4 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*DMA 2*		
	[A]		[B]	[C]	[A] x [C]			
2-B	*11745*	Natural Soil (C)	*0.3*	*0.23*	*2644.6*	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
	$A_T = \Sigma[A]$				$\Sigma = [D]$	[E]	$[F] = \frac{[D]x[E]}{12}$	[G]
	11745				2644.5	0.65	143.2	2500

[B], [C] are obtained from Section 2.3.1 of the WQMP Guidance Document
[E] is obtained from Exhibit A of the WQMP Guidance Document
[G] is obtained from LID BMP design procedure sheet, placed in Appendix 6

Table D.5 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*DMA 3*		
	[A]		[B]	[C]	[A] x [C]			
3-A	5355	Concrete	*1*	*0.89*	4776.7	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
3-B	4308	Landscape	*0.1*	*0.11*	475.9			
3-D	22992	Asphalt	*1*	*0.89*	20508.9			
3-E	803	Infiltration Trench	*0.1*	*0.11*	*88.7*			
	$A_T = \Sigma[A]$				Σ= [D]	[E]	$[F] = \frac{[D]x[E]}{12}$	[G]
	33458				25850.2	0.65	1400.2	1767

[B], [C] are obtained from Section 2.3.1 of the WQMP Guidance Document
[E] is obtained from Exhibit A of the WQMP Guidance Document
[G] is obtained from LID BMP design procedure sheet, placed in Appendix 6

Table D.6 DCV Calculations for LID BMPs

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Impervious Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*DMA 4*		
	[A]		[B]	[C]	[A] x [C]			
4-A	7419	Concrete	*1*	*0.89*	6617.7	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
4-B	9418	Landscape	*0.1*	*0.11*	1040.3			
4-D	30720	Asphalt	*1*	*0.89*	27402.2			
4-E	925	Infiltration Trench	*0.1*	*0.11*	*102.2*			
	$A_T = \Sigma[A]$				Σ= [D]	[E]	$[F] = \frac{[D]x[E]}{12}$	[G]
	48482				35162.4	0.65	1904.6	2035

[B], [C] are obtained from Section 2.3.1 of the WQMP Guidance Document
[E] is obtained from Exhibit A of the WQMP Guidance Document
[G] is obtained from LID BMP design procedure sheet, placed in Appendix 6

Section E: Alternative Compliance (LID Waiver Program)

LID BMPs are expected to be feasible on virtually all projects. Where LID BMPs have been demonstrated to be infeasible as documented in Section D, other Treatment Control BMPs must be used (subject to confirmation of LID waiver approval by the Regional Board). For the project, the following applies:

☒ LID Principles and LID BMPs have been incorporated into the site design to fully address all Drainage Management Areas. No alternative compliance measures are required for this project and thus this Section is not required to be completed.

- *Or* -

☐ The following Drainage Management Areas are unable to be addressed using LID BMPs. A site-specific analysis demonstrating technical infeasibility of LID BMPs has been approved by the Regional Board and included in Appendix 5. Additionally, no downstream regional and/or sub-regional LID BMPs exist or are available for use by the project. The alternative compliance measures on the following pages are being implemented to ensure that any pollutant loads expected to be discharged by not incorporating LID BMPs, are fully mitigated.

Section F: Hydromodification

F.1 Hydrologic Conditions of Concern (HCOC) Analysis

The project does not create a Hydrologic Condition of Concern, meeting the criteria for HCOC Exemption as shown below:

HCOC EXEMPTION 1: The Priority Development Project disturbs less than one acre. The Copermittee has the discretion to require a Project-Specific WQMP to address HCOCs on projects less than one acre on a case by case basis. The disturbed area calculation should include all disturbances associated with larger common plans of development.

Does the project qualify for this HCOC Exemption? ☐ Y ☒ N

HCOC EXEMPTION 2: The volume and time of concentration[1] of storm water runoff for the post-development condition is not significantly different from the pre-development condition for a 2-year return frequency storm (a difference of 5% or less is considered insignificant) using one of the following methods to calculate:

- Riverside County Hydrology Manual
- Technical Release 55 (TR-55): Urban Hydrology for Small Watersheds (NRCS 1986), or derivatives thereof, such as the Santa Barbara Urban Hydrograph Method
- Other methods acceptable to the Co-Permittee

Does the project qualify for this HCOC Exemption? ☐ Y ☒ N

Results included in Table F.1 below and hydrologic analysis included in Appendix 7.

Table F.1 Hydrologic Conditions of Concern Summary

	2 year – 24 hour		
	Pre-condition	**Post-condition**	**% Difference**
Time of Concentration	22.5	13	-42.2
Flow (CFS)	6.14	16.5	168.7
Volume (Cubic Feet)	12044	18728*	55.5

[1] Time of concentration is defined as the time after the beginning of the rainfall when all portions of the drainage basin are contributing to flow at the outlet.

*Post-condition volume is less than the design capture volume of the infiltration basin.

HCOC EXEMPTION 3: All downstream conveyance channels that will receive runoff from the project are engineered and regularly maintained to ensure design flow capacity; no sensitive stream habitat areas will be adversely affected; or are not identified on Hydromodification Sensitivity Maps.

Does the project qualify for this HCOC Exemption? ☒ Y ☐ N

F.2 HCOC Mitigation

As an alternative to the HCOC Exemption Criteria above, HCOC criteria is considered mitigated if the project meets one of the following conditions, as indicated:

☐ a. Additional LID BMPS are implemented onsite or offsite to mitigate potential erosion or habitat impacts as a result of HCOCs. This can be conducted by an evaluation of site-specific conditions utilizing accepted professional methodologies published by entities such as the California Stormwater Quality Association (CASQA), the Southern California Coastal Water Research Project (SCCRWP), or other Co-Permittee approved methodologies for site-specific HCOC analysis.

☐ b. The project is developed consistent with an approved Watershed Action Plan that addresses HCOC in Receiving Waters.

☐ c. Mimicking the pre-development hydrograph with the post-development hydrograph, for a 2-year return frequency storm. Generally, the hydrologic conditions of concern are not significant, if the post-development hydrograph is no more than 10% greater than pre-development hydrograph. In cases where excess volume cannot be infiltrated or captured and reused, discharge from the site must be limited to a flow rate no greater than 110% of the pre-development 2-year peak flow.

☒ d. None of the above.

Note: The HCOC mitigation is not applicable due to the project meeting the HCOC exemption criteria.

Section G: Source Control BMPs

Table G.1 Permanent and Operational Source Control Measures

Potential Sources of Runoff pollutants	Permanent Structural Source Control BMPs	Operational Source Control BMPs
D2. Landscape/ Outdoor Pesticide Use	-Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. -Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. Consider using pest-resistant plants, especially adjacent to hardscape.	-Maintain landscaping using minimum or no pesticides. See applicable operational BMPs in "What you should know for Landscape and Gardening" at http://rcflood.org/stormwater
G. Refuse areas	-Refuse area shall have a sign posted stating "Do not dump hazardous materials here" or similar.	- Sweep refuse area regularly to prevent accumulation of litter and debris.
M. Loading Docks	-Loading area shall have a roof overhang or door skirts (cowling) at each bay that enclose the end of the trailer.	-Move loaded and unloaded items indoors as soon as possible.
P. Plazas, sidewalks, and parking lots.		-Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect wash water containing any cleaning agent or degreaser and discharge to the sanitary sewer, not to a storm drain.

Section H: Construction Plan Checklist

Table H.1 Construction Plan Cross-reference

BMP No. or ID	BMP Identifier and Description	Plan Sheet Number(s)	Latitude / Longitude
1-E	Infiltration Basin		34°01’01.0”N 117°21’13.0”W
2-B	Unlined Channel		34° 1'04.5"N 117°21'24.0"W
3-E	Infiltration Trench		34° 1'06"N 117°21'22.0"W
4-E	Infiltration Trench		34° 1'06"N 117°21'13.0"W

Section I: Operation, Maintenance and Funding

As required by the City of Riverside, the following Operation, Maintenance and Funding details are provided as summarized:

1. A means to finance and implement facility maintenance in perpetuity, including replacement cost.
2. Acceptance of responsibility for maintenance from the time the BMPs are constructed until responsibility for operation and maintenance is legally transferred.
3. An outline of general maintenance requirements for the Stormwater BMPs selected.
4. Figures delineating and designating pervious and impervious areas, location, and type of Stormwater BMP, and tables of pervious and impervious areas served by each facility.
5. A separate list and location of self-retaining areas or areas addressed by LID Principles that do not require specialized O&M or inspections but will require typical landscape maintenance as noted in Chapter 5, pages 85-86, in the WQMP Guidance.

See Appendix 9 for a detailed Stormwater BMP Operation and Maintenance Plan that sets forth a maintenance schedule for each of the Stormwater BMPs built on site, and an agreement assigning responsibility for maintenance and providing for inspections and certification.

Maintenance Mechanism: **Covenant & Agreement**

Will the proposed BMPs be maintained by a Home Owners' Association (HOA) or Property Owners Association (POA)?

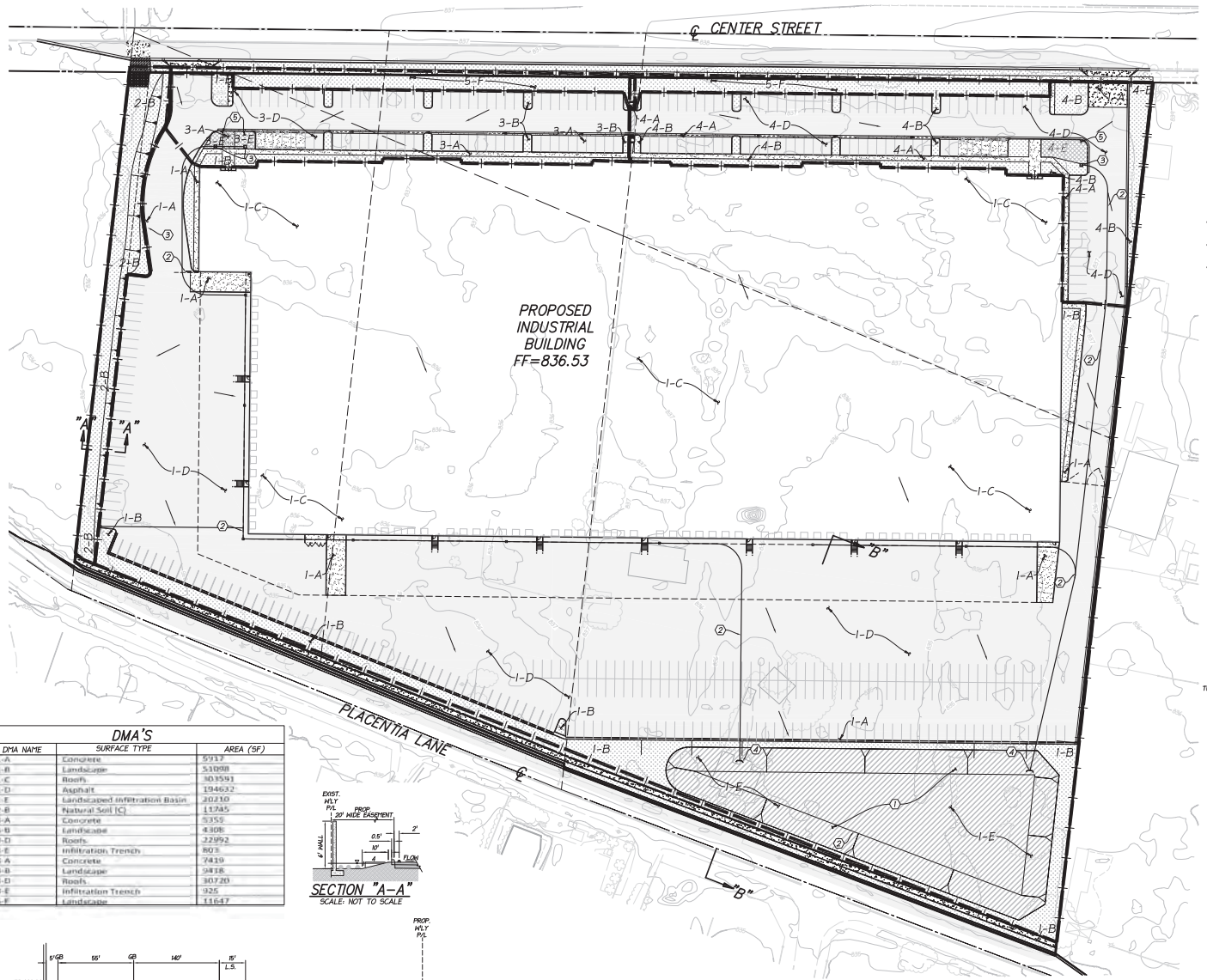
☐ Y ☒ N **Property Owner is Responsible**

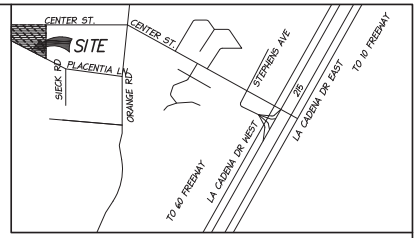
Operation and Maintenance Plan and Maintenance Mechanism are included in Appendix 9. Educational materials for those personnel that will be maintaining the proposed BMPs within this Project-Specific WQMP are included in Appendix 10.

Appendix 1: Maps and Site Plans

Location Map, WQMP Site Plan and Receiving Waters Map

WQMP EXHIBIT
CITY OF RIVERSIDE
JULY 2015





VICINITY MAP

THOMAS GUIDE - PAGE 645, J-6 (2005 EDITION)
SECTION 12, TOWNSHIP 2 SOUTH RANGE 5 WEST
NOT TO SCALE

BMP LEGEND

1. PROPOSED INFILTRATION TRENCH PER DETAIL HEREON
2. PROPOSED HDPE STORM DRAIN PIPE
3. PROPOSED CATCH BASIN
4. PROPOSED HEADWALL AND FOREBAY
5. PROPOSED INFILTRATION TRENCH PER DETAIL HEREON

DIRECTION OF FLOW

PROPOSED DRAINAGE MANAGEMENT AREA BOUNDARY

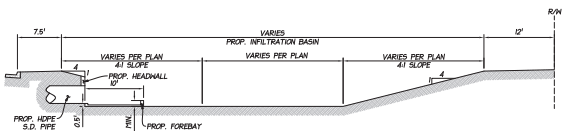
PROPOSED LANDSCAPED

CONCRETE SIDEWALK

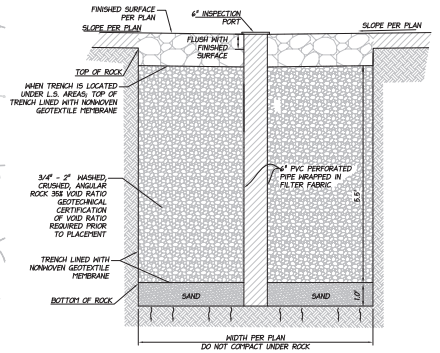
PROPOSED AC PAVING

LEGEND

	EXISTING PROPERTY LINE
	PROPOSED RIGHT OF WAY
	EXISTING RIGHT OF WAY
	EXISTING CENTERLINE
	PROPOSED CURB
	EXISTING CURB
	PROPOSED SIDEWALK
	EXISTING SIDEWALK
	EXISTING DIRT ROAD
	PROPOSED PARKING STRIPE
	EXISTING EASEMENT
	EXISTING CONTOUR MAJOR
	EXISTING CONTOUR MINOR
	EXISTING FENCE
	EXISTING BUILDING
	EXISTING CONCRETE
	EXISTING EDGE OF PAVEMENT
9" 6"	PROPOSED EDGE OF PAVEMENT
915	EXISTING CONTOUR ELEVATION
× 915	EXISTING SPOT ELEVATION
EP	EDGE OF PAVEMENT
R/W	RIGHT OF WAY
P/L	PROPERTY LINE
EXIST.	EXISTING
PROP.	PROPOSED
S.F.	SQUARE FEET
D/W	DRIVEWAY
S/W	SIDEWALK



DETAIL "A"
SCALE: 1"=10'

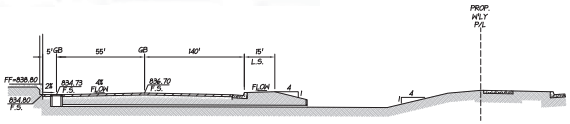


TYPICAL INFILTRATION TRENCH
NTS (PVT)

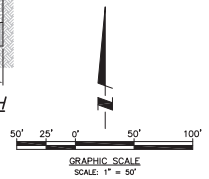
DMA'S

DMA NAME	SURFACE TYPE	AREA (SF)
1-A	Concrete	5937
1-B	Landscape	51098
1-C	Roofs	303591
1-D	Asphalt	194632
1-E	Landscaped Infiltration Basin	20210
2-B	Natural Soil (C)	11745
4-A	Concrete	5355
4-B	Landscape	4308
4-D	Roofs	22952
3-E	Infiltration Trench	803
4-A	Concrete	7419
4-B	Landscape	9418
4-D	Roofs	30720
4-E	Infiltration Trench	925
4-F	Landscape	11647

SECTION "A-A"
SCALE: NOT TO SCALE



SECTION "B-B"
SCALE: NOT TO SCALE



GRAPHIC SCALE
SCALE: 1" = 50'

PREPARED BY:

PSOMAS
1500 IOWA AVENUE, SUITE 210
RIVERSIDE, CA 92507
(951) 787-8421 WWW.PSOMAS.COM

CITY OF RIVERSIDE
WQMP SITE PLAN
CENTER STREET

CENTER ST. INDUSTRIAL BLOCK
POST-DEVELOPMENT HYDROLOGY KEY MAP
CITY OF RIVERSIDE

N

150 75 0' 150 300

GRAPHIC SCALE
SCALE: 1" = 150

LEGEND

DRAINAGE AREA DESIGNATION

DIRECTION OF FLOW

PREPARED BY:
PSOMAS
1500 IOWA AVENUE, SUITE 210
RIVERSIDE, CA 92507
(951) 787-8421 WWW.PSOMAS.COM

CITY OF RIVERSIDE
CENTER ST. INDUSTRIAL BLOCK
POST-DEVELOPMENT
HYDROLOGY KEY MAP

Drawing: G:\491.001\Drawings\Prelim\Hydrology\491001-POST_DEV_HYD.dwg Plotted By: andrew.woodard Layout: 11x17 L Last Saved: Tue Nov 25, 2014 - 11:32am Last Plotted: Thu Dec 04, 2014 - 10:39am

CENTER ST. INDUSTRIAL BLOCK
PRE-DEVELOPMENT HYDROLOGY KEY MAP
CITY OF RIVERSIDE

150 75 0' 150 300

GRAPHIC SCALE
SCALE: 1" = 150

LEGEND

DRAINAGE AREA DESIGNATION

DIRECTION OF FLOW

PREPARED BY:
PSOMAS
1500 IOWA AVENUE, SUITE 210
RIVERSIDE, CA 92507
(951) 787-8421 WWW.PSOMAS.COM

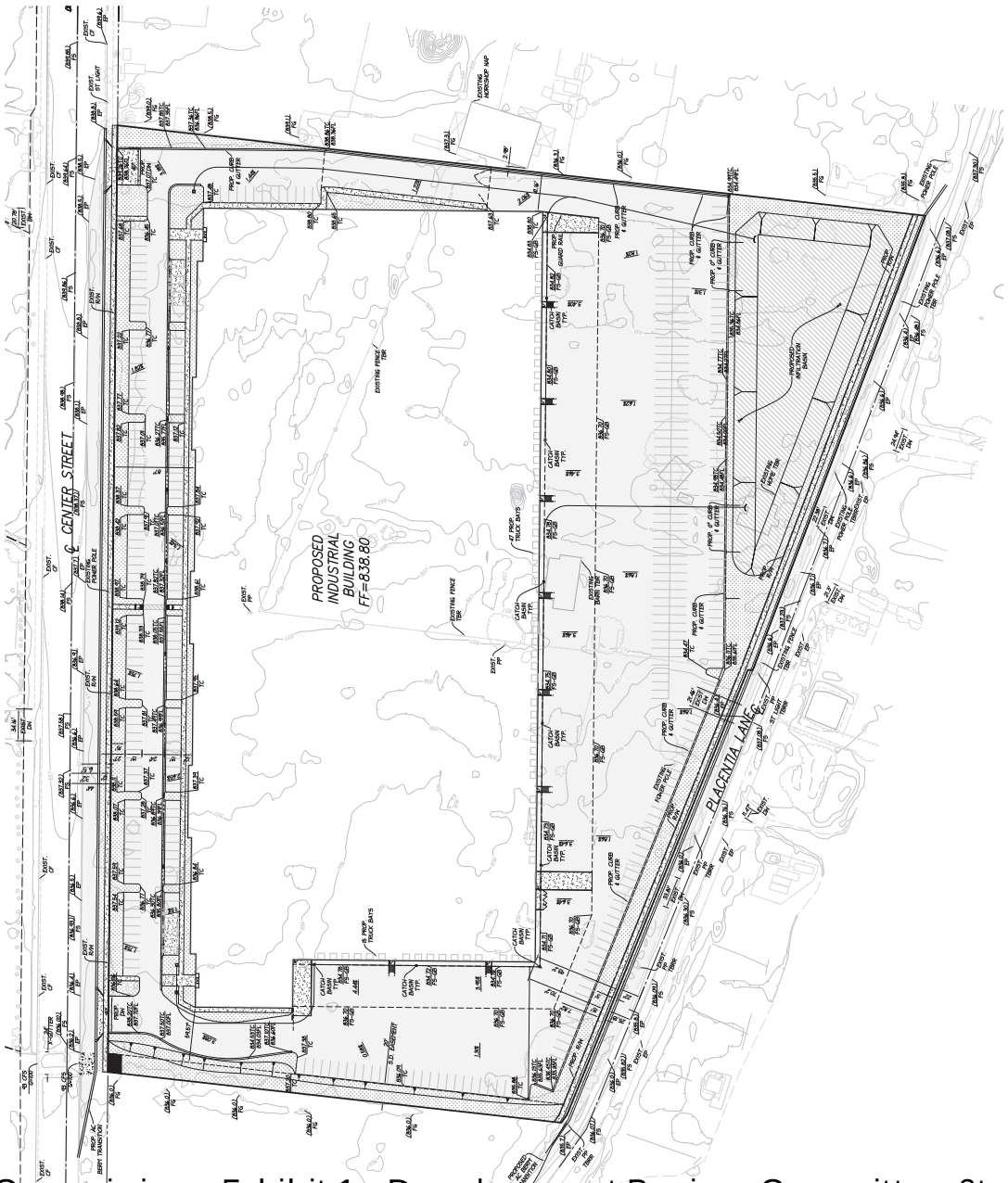
CITY OF RIVERSIDE
CENTER ST. INDUSTRIAL BLOCK
PRE-DEVELOPMENT
HYDROLOGY KEY MAP

Drawing: G:\491.001\Drawings\Prelim\Hydrology\491001-PRE_DEV_HYD.dwg Plotted By: andrew.woodard Layout: 11x17 L Last Saved: Tue Nov 25, 2014 - 11:19am Last Plotted: Thu Dec 04, 2014 - 10:40am


Yucaipa
Redlands
San Bernardino
Moreno Valley
Perris
Menifee
Lake Elsinore
Center St
Riverside
Fontana
Rancho Cucamonga
Corona
Rancho Santa Margarita
Mission Viejo
Pomona
West Covina
Irvine
Santa Ana
Orange
Costa Mesa
Anaheim
Huntington Beach
215
66
74
15
71
60
91
241
133
261
5
55
405
1
22
19.0 mi
© 2014 Google
Image Landsat
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Data USGS
elev 1870 ft

Appendix 2: Construction Plans

Grading and Drainage Plans


CENTER STREET
PROPOSED INDUSTRIAL BUILDING FF=838.80
PLACENTIA LANE

Appendix 3: Soils Information

Geotechnical Study and Other Infiltration Testing Data

Appendix 4: Historical Site Conditions

Phase I Environmental Site Assessment or Other Information on Past Site Use

N/A

Appendix 5: LID Infeasibility

LID Technical Infeasibility Analysis

N/A

Appendix 6: BMP Design Details

BMP Sizing, Design Details and other Supporting Documentation

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	Psomas	Date	7/9/2015
Designed by	AW	Case No	P14-1033
Company Project Number/Name	491.001		

BMP Identification

BMP NAME / ID: 1-E

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.65 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	Design Storm Depth (in)	Design Capture Volume, V_{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
1-A	5917	Concrete or Asphalt	1	0.89	5278			
1-B	51098	Ornamental Landscaping	0.1	0.11	5644.2			
1-C	303591	Roofs	1	0.89	270803.2			
1-D	194632	Concrete or Asphalt	1	0.89	173611.7			
1-E	20210	Ornamental Landscaping	0.1	0.11	2232.4			
	575448	Total			457569.5	0.65	24785	101050

Notes:

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	Psomas	Date	7/9/2015
Designed by	AW	Case No	P14-1033
Company Project Number/Name	491.001		

BMP Identification

BMP NAME / ID: 2-E

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.65 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
2-B	*11745*	*Natural (C Soil)*	*0.3*	*0.23*	*2644.6*			
	11745	***Total***			**2644.6**	**0.65**	***143.2***	***2500***

Notes:

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	Psomas	Date	7/9/2015
Designed by	AW	Case No	P14-1033
Company Project Number/Name	491.001		

BMP Identification

BMP NAME / ID 3-E

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth,
from the Isohyetal Map in Handbook Appendix E

D_{85}= 0.65 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
3-A	*5355*	*Concrete or Asphalt*	*1*	*0.89*	*4776.7*			
3-B	*4308*	*Ornamental Landscaping*	*0.1*	*0.11*	*475.9*			
3-D	*22992*	*Concrete or Asphalt*	*1*	*0.89*	*20508.9*			
3-E	*803*	*Ornamental Landscaping*	*0.1*	*0.11*	*88.7*			
	33458	***Total***			**25850.2**	**0.65**	***1400.2***	***1767***

Notes:

Santa Ana Watershed - BMP Design Volume, V_{BMP}

(Rev. 10-2011)

Legend: Required Entries / Calculated Cells

*(Note this worksheet shall **only** be used in conjunction with BMP designs from the **LID BMP Design Handbook**)*

Company Name	Psomas	Date	7/9/2015
Designed by	AW	Case No	P14-1033
Company Project Number/Name	491.001		

BMP Identification

BMP NAME / ID: 4-E

Must match Name/ID used on BMP Design Calculation Sheet

Design Rainfall Depth

85th Percentile, 24-hour Rainfall Depth, from the Isohyetal Map in Handbook Appendix E: D_{85}= 0.65 inches

Drainage Management Area Tabulation

Insert additional rows if needed to accommodate all DMAs draining to the BMP

DMA Type/ID	DMA Area (square feet)	Post-Project Surface Type	Effective Imperivous Fraction, I_f	DMA Runoff Factor	DMA Areas x Runoff Factor	*Design Storm Depth (in)*	*Design Capture Volume, V_{BMP} (cubic feet)*	*Proposed Volume on Plans (cubic feet)*
4-A	*7419*	*Concrete or Asphalt*	*1*	*0.89*	*6617.7*			
4-B	*9418*	*Ornamental Landscaping*	*0.1*	*0.11*	*1040.3*			
4-D	*30720*	*Concrete or Asphalt*	*1*	*0.89*	*27402.2*			
4-E	*925*	*Ornamental Landscaping*	*0.1*	*0.11*	*102.2*			
	48482	***Total***			35162.4	0.65	*1904.6*	*2035*

Notes:

Infiltration Basin - Design Procedure (Rev. 03-2012)	BMP ID 1-E	Legend:	Required Entries / Calculated Cells
Company Name: Psomas			Date: 7/10/2015
Designed by: ACW			County/City Case No.: P14-1033

Design Volume

a) Tributary area (BMP subarea)	A_T =	13.2	acres
b) Enter V_{BMP} determined from Section 2.1 of this Handbook	V_{BMP}=	24,709	ft^3

Maximum Depth

a) Infiltration rate	I =	10	in/hr
b) Factor of Safety (See Table 1, Appendix A: "Infiltration Testing" from this BMP Handbook)	FS =	12	
c) Calculate D_1 $D_1 = \frac{I\ (in/hr) \times 72\ hrs}{12\ (in/ft) \times FS}$	D_1 =	5.0	ft
d) Enter the depth of freeboard (at least 1 ft)		1	ft
e) Enter depth to historic high ground water (measured from **top** of basin)		31	ft
f) Enter depth to top of bedrock or impermeable layer (measured from **top** of basin)		100	ft
g) D_2 is the smaller of: Depth to groundwater - (10 ft + freeboard) and Depth to impermeable layer - (5 ft + freeboard)	D_2 =	20.0	ft
h) D_{MAX} is the smaller value of D_1 and D_2 but shall not exceed 5 feet	D_{MAX} =	5.0	ft

Basin Geometry

a) Basin side slopes (no steeper than 4:1)	z =	6	:1
b) Proposed basin depth (excluding freeboard)	d_B =	5	ft
c) Minimum bottom surface area of basin ($A_S = V_{BMP}/d_B$)	A_S =	4942	ft^2
d) Proposed Design Surface Area	A_D =	20210	ft^2

Forebay

a) Forebay volume (minimum 0.5% V_{BMP})	Volume =	124	ft^3
b) Forebay depth (height of berm/splashwall. 1 foot min.)	Depth =	1	ft
c) Forebay surface area (minimum)	Area =	124	ft^2
d) Full height notch-type weir	Width (W) =	10.0	in

Notes:

Infiltration Trench - Design Procedure	BMP ID 3-E	Legend:	Required Entries / Calculated Cells

Company Name:	Psomas	Date:	7/9/2015
Designed by:	AW	County/City Case No.:	P14-1033

Design Volume

Enter the area tributary to this feature, Max = 10 acres	A_t=	1	acres
Enter V_{BMP} determined from Section 2.1 of this Handbook	V_{BMP}=	1,400	ft^3

Calculate Maximum Depth of the Reservoir Layer

Enter Infiltration rate	I =	10.0	in/hr
Enter Factor of Safety, FS (unitless)	FS =	5	
Obtain from Table 1, Appendix A: "Infiltration Testing" of this BMP Handbook			
	n =	40	%

Calculate D_1. $D_1 = \dfrac{I\ (in/hr) \times 72\ hrs}{12\ (in/ft) \times (n/100) \times FS}$ D_1 = 30.00 ft

Enter depth to historic high groundwater mark (measured from finished grade)		31	ft
Enter depth to top of bedrock or impermeable layer (measured from finished grade)		100	ft
D_2 is the smaller of:			
Depth to groundwater - 11 ft; & Depth to impermeable layer - 6 ft	D_2 =	20.0	ft
D_{MAX} is the smaller value of D_1 and D_2, must be less than or equal to 8 feet.	D_{MAX}=	8.0	ft

Trench Sizing

Enter proposed reservoir layer depth D_R, must be ≤ D_{MAX}	D_R =	5.50	ft

Calculate the design depth of water, d_W

Design $d_W = (D_R) \times (n/100)$ Design d_W= 2.20 ft

Minimum Surface Area, A_S $A_S = \dfrac{V_{BMP}}{d_W}$ A_S = 636 ft^2

Proposed Design Surface Area	A_D =	803	ft^2
Minimum Width = D_R + 1 foot pea gravel		6.50	ft
Sediment Control Provided? (Use pulldown)		Yes	
Geotechnical report attached? (Use pulldown)		Yes	

If the trench has been designed correctly, there should be no error messages on the spreadsheet.

Infiltration Trench - Design Procedure	BMP ID 4-E	Legend:	Required Entries / Calculated Cells

Company Name:	Psomas	Date:	7/9/2015
Designed by:	AW	County/City Case No.:	P14-1033

Design Volume

Enter the area tributary to this feature, Max = 10 acres — A_t = 1 acres

Enter V_{BMP} determined from Section 2.1 of this Handbook — V_{BMP} = 1,905 ft^3

Calculate Maximum Depth of the Reservoir Layer

Enter Infiltration rate — I = 10.0 in/hr

Enter Factor of Safety, FS (unitless) — FS = 5

Obtain from Table 1, Appendix A: "Infiltration Testing" of this BMP Handbook

n = 40 %

Calculate D_1. $D_1 = \dfrac{\text{I (in/hr) x 72 hrs}}{\text{12 (in/ft) x (n /100) x FS}}$ — D_1 = 30.00 ft

Enter depth to historic high groundwater mark (measured from finished grade) — 31 ft

Enter depth to top of bedrock or impermeable layer (measured from finished grade) — 100 ft

D_2 is the smaller of:

Depth to groundwater - 11 ft; & Depth to impermeable layer - 6 ft — D_2 = 20.0 ft

D_{MAX} is the smaller value of D_1 and D_2, must be less than or equal to 8 feet. — D_{MAX} = 8.0 ft

Trench Sizing

Enter proposed reservoir layer depth D_R, must be ≤ D_{MAX} — D_R = 5.50 ft

Calculate the design depth of water, d_W

Design $d_W = (D_R) \times (n/100)$ — Design d_W = 2.20 ft

Minimum Surface Area, A_S $A_S = \dfrac{V_{BMP}}{d_W}$ — A_S = 866 ft^2

Proposed Design Surface Area — A_D = 925 ft^2

Minimum Width = D_R + 1 foot pea gravel — 6.50 ft

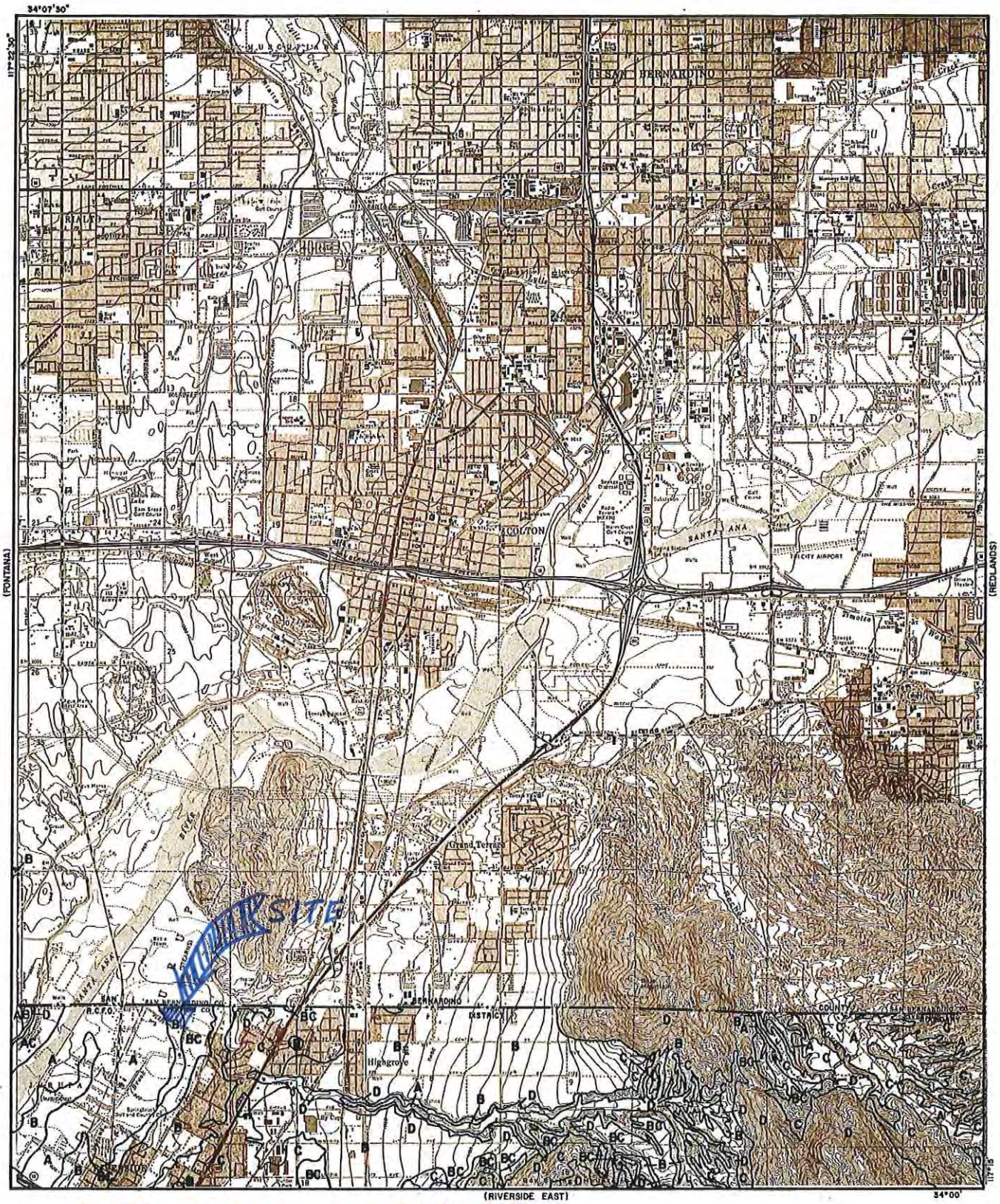
Sediment Control Provided? (Use pulldown)

Geotechnical report attached? (Use pulldown)

If the trench has been designed correctly, there should be no error messages on the spreadsheet.

Appendix 7: Hydromodification

Supporting Detail Relating to Hydrologic Conditions of Concern



SITE LOCATED ON "B" SOIL

LEGEND

—— SOILS GROUP BOUNDARY

A SOILS GROUP DESIGNATION

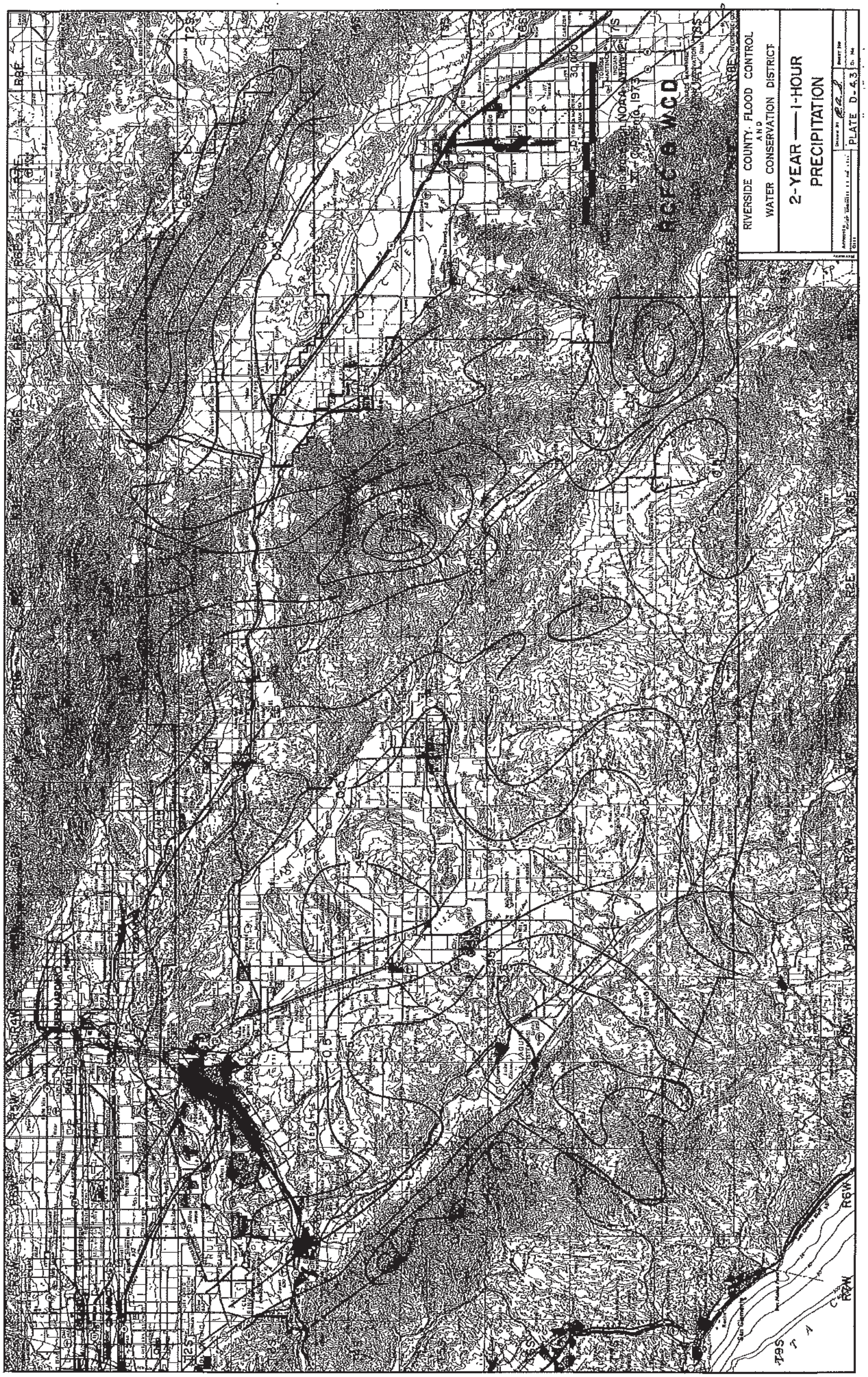
RCFC&WCD

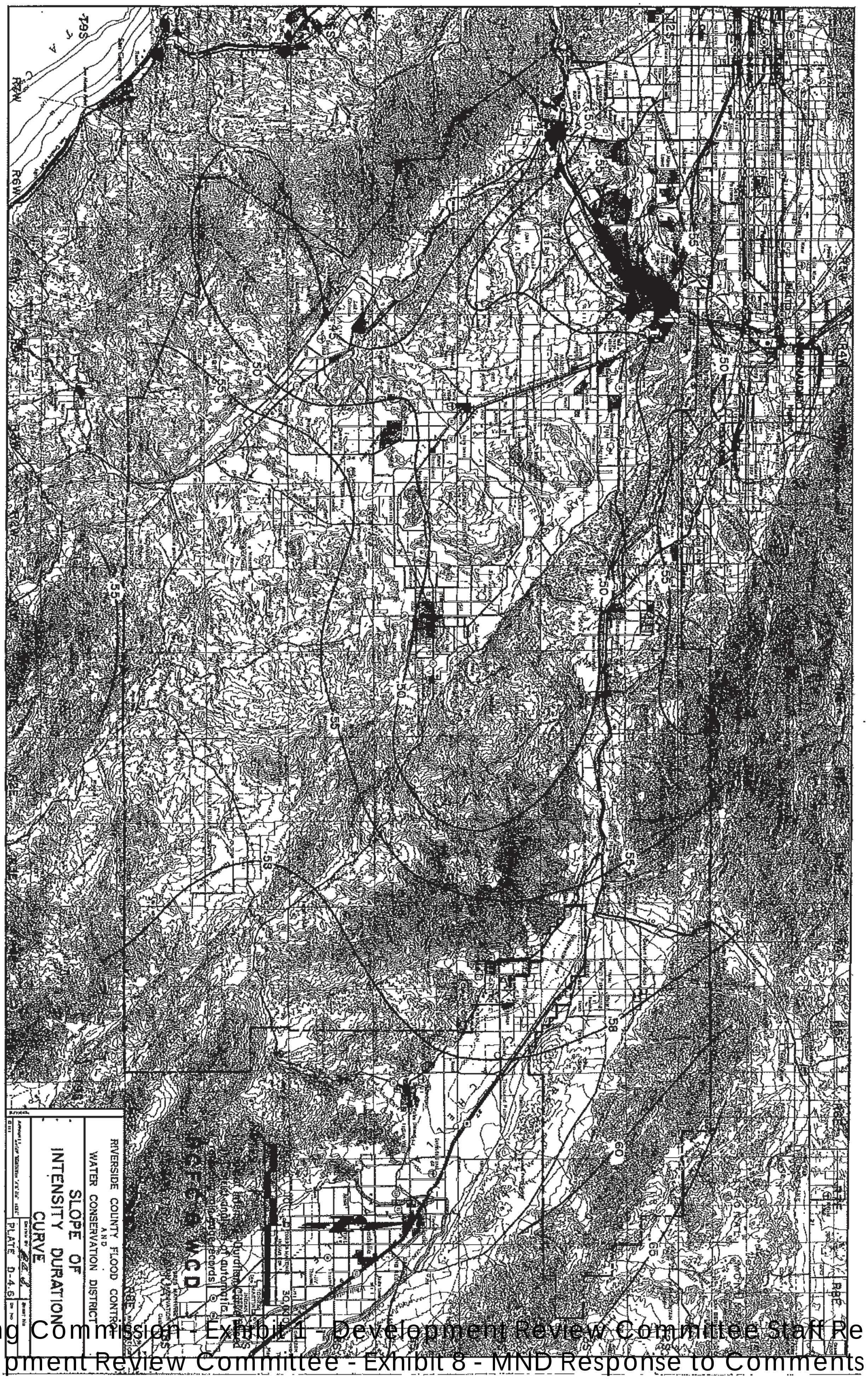
HYDROLOGY MANUAL

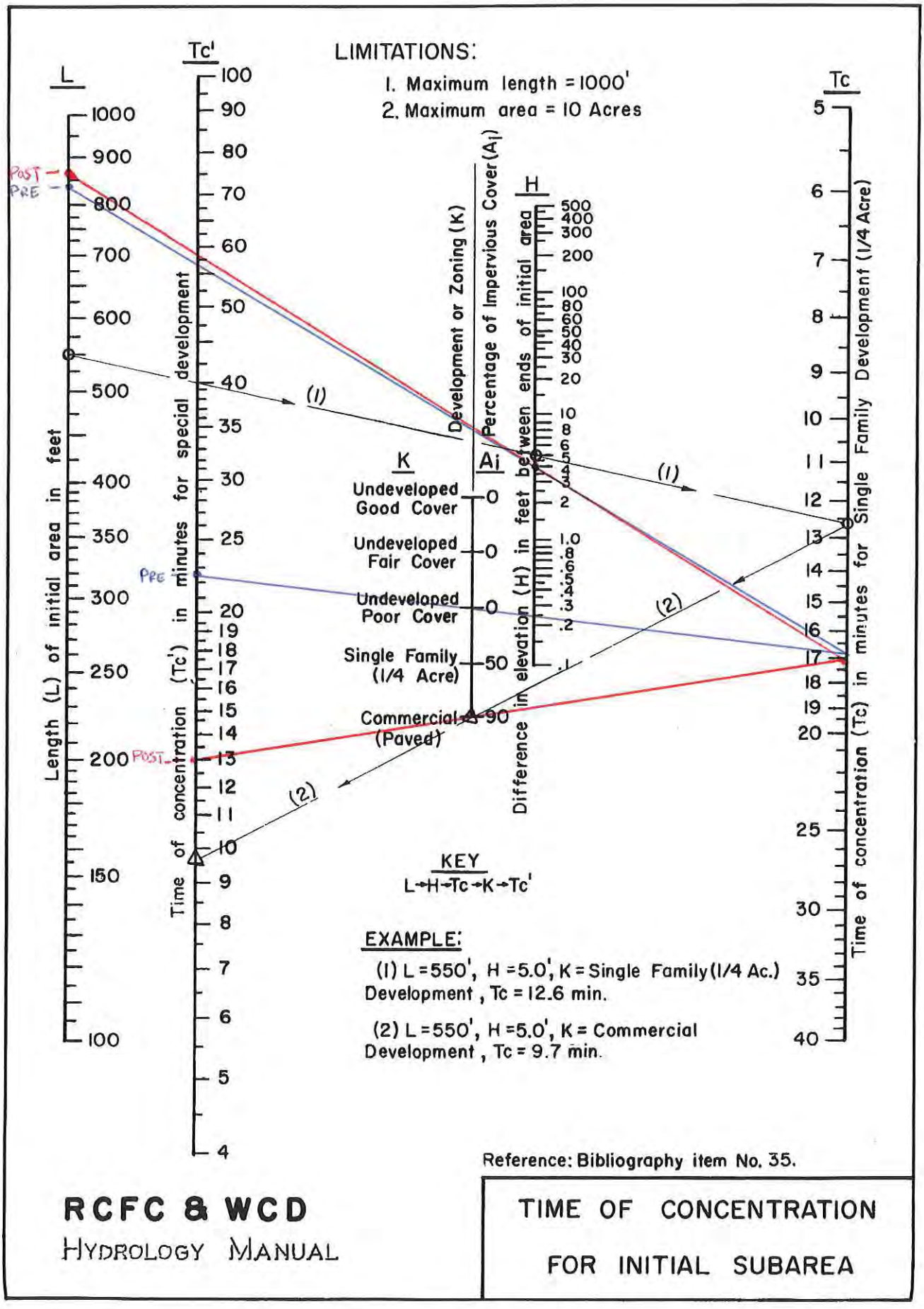
0 FEET 5000

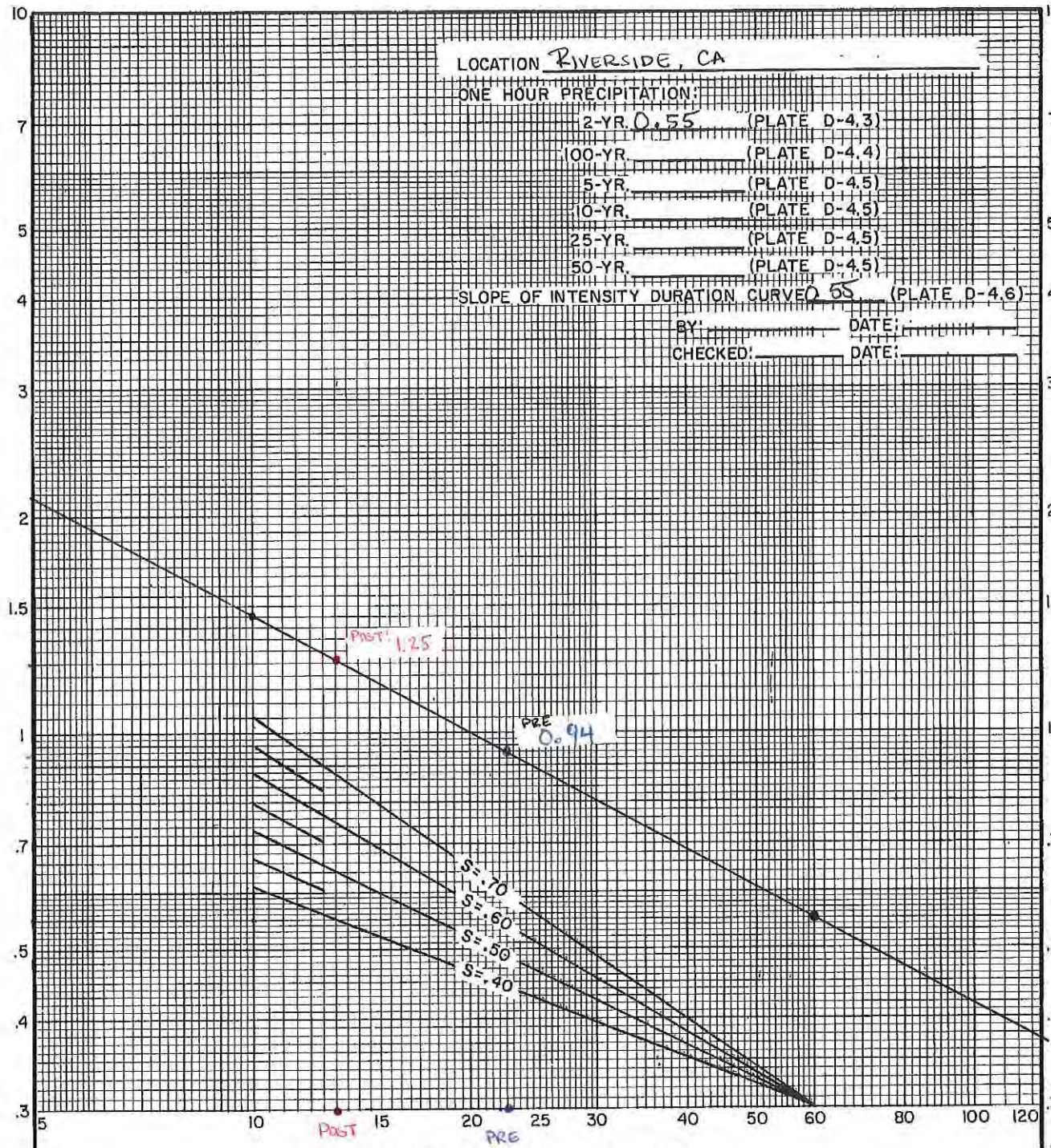
HYDROLOGIC SOILS GROUP MAP FOR SAN BERNARDINO—SOUTH

PLATE C-1.04


RIVERSIDE COUNTY FLOOD CONTROL
AND
WATER CONSERVATION DISTRICT
2-YEAR — 1-HOUR
PRECIPITATION
PLATE D-4.3
RCFC & WCD


RIVERSIDE COUNTY FLOOD CONTROL
AND
WATER CONSERVATION DISTRICT
SLOPE OF
INTENSITY DURATION
CURVE
PLATE D-4.6


LIMITATIONS:
1. Maximum length = 1000'
2. Maximum area = 10 Acres
L
Tc'
Tc
Length (L) of initial area in feet
Time of concentration (Tc') in minutes for special development
Development or Zoning (K)
Percentage of Impervious Cover (Ai)
H
Difference in elevation (H) in feet between ends of initial area
Time of concentration (Tc) in minutes for Single Family Development (1/4 Acre)
K
Ai
Undeveloped Good Cover
Undeveloped Fair Cover
Undeveloped Poor Cover
Single Family (1/4 Acre)
Commercial (Paved)
POST
PRE
(1)
(2)
KEY
L→H→Tc→K→Tc'
EXAMPLE:
(1) L = 550', H = 5.0', K = Single Family (1/4 Ac.) Development, Tc = 12.6 min.
(2) L = 550', H = 5.0', K = Commercial Development, Tc = 9.7 min.
Reference: Bibliography item No. 35.
RCFC & WCD
HYDROLOGY MANUAL
TIME OF CONCENTRATION
FOR INITIAL SUBAREA
PLATE D-3



RCFC & WCD
HYDROLOGY MANUAL

INTENSITY — DURATION
CURVES
CALCULATION SHEET

PLATE D-4.7

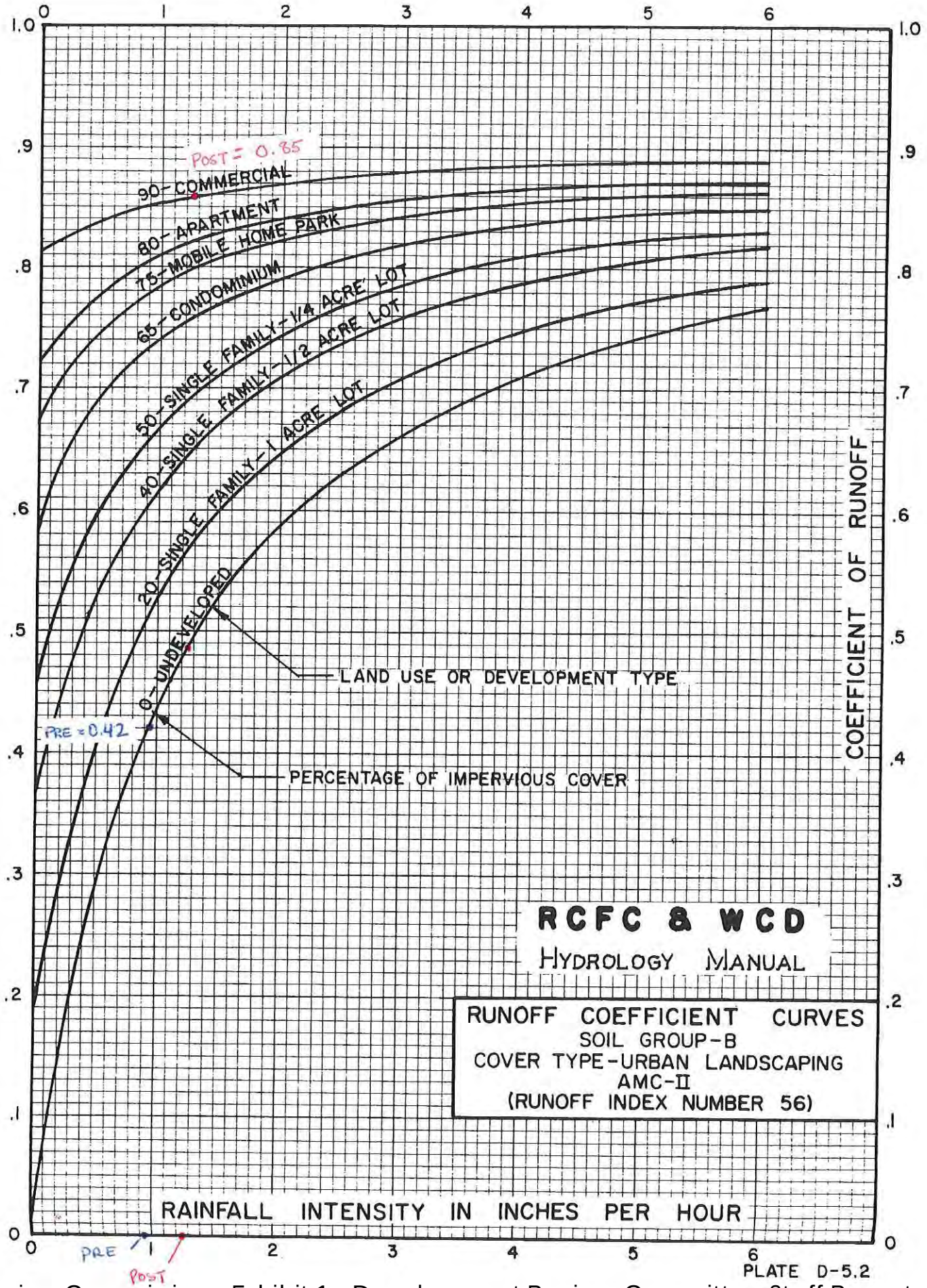

POST = 0.85
90- COMMERCIAL
80- APARTMENT
75- MOBILE HOME PARK
65- CONDOMINIUM
50- SINGLE FAMILY - 1/4 ACRE LOT
40- SINGLE FAMILY - 1/2 ACRE LOT
20- SINGLE FAMILY - 1 ACRE LOT
0- UNDEVELOPED
PRE = 0.42
LAND USE OR DEVELOPMENT TYPE
PERCENTAGE OF IMPERVIOUS COVER
COEFFICIENT OF RUNOFF
RCFC & WCD
HYDROLOGY MANUAL
RUNOFF COEFFICIENT CURVES
SOIL GROUP-B
COVER TYPE-URBAN LANDSCAPING
AMC-II
(RUNOFF INDEX NUMBER 56)
RAINFALL INTENSITY IN INCHES PER HOUR
PRE
POST
0 1 2 3 4 5 6
1.0 .9 .8 .7 .6 .5 .4 .3 .2 .1 0

PLATE D-5.2

RCFC & WCD HYDROLOGY MANUAL
RATIONAL METHOD CALCULATION FORM

Sheet No. ___ of ___ Sheets

PROJECT _____

FREQUENCY 2yr. · 1Hr

Calculated by _____ DATE

Checked by _____ DATE

DRAINAGE AREA	Soil & Development	A Acres	I in/hr.	C	ΔQ CFS	Σ Q CFS	SLOPE	SECTION	v FPS	L FT.	T MIN.	Σ T	REMARKS
PRE	UNDEVELOPED	15.55	0.94	0.42	6.14					840	22.5		
POST	COMMERCIAL	15.55	1.25	0.85	16.52					960	13		

WO 454.001

HYDROGRAPH FOR SMALL AREAS

Tc= 22.5

2 Year Pre

Q=C*I*A C= 0.42 I= 0.94 A= 15.55 | 6.13914

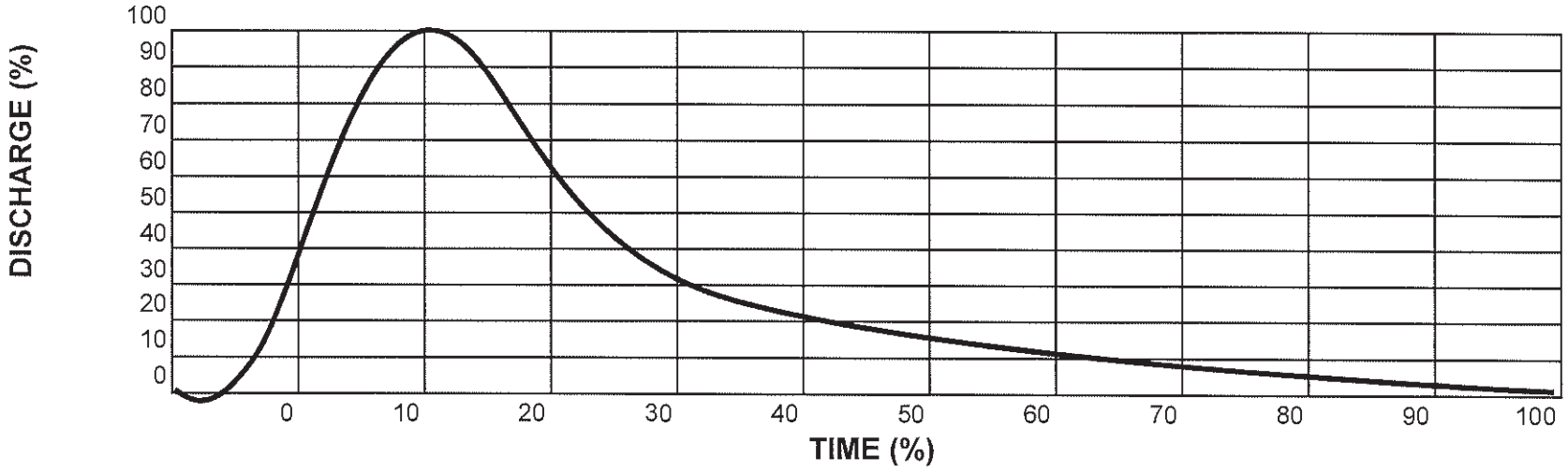
Total Time=Tc*5*60 Tc= 22.5 x 5 x 60 = 6750

Scale Factor= 1 sq. cm = Q/10 x Time/20

0.613914 x 337.5 = 207.196 CF/Sq CM

207.196 x 58.13 = 12044 CF

58.13 is a constant to convert area under the curve to cubic feet



WO 454.001

HYDROGRAPH FOR SMALL AREAS

Tc= 13

2 Year Post

Q=C*I*A C= 0.85 I= 1.25 A= 15.55 16.52188

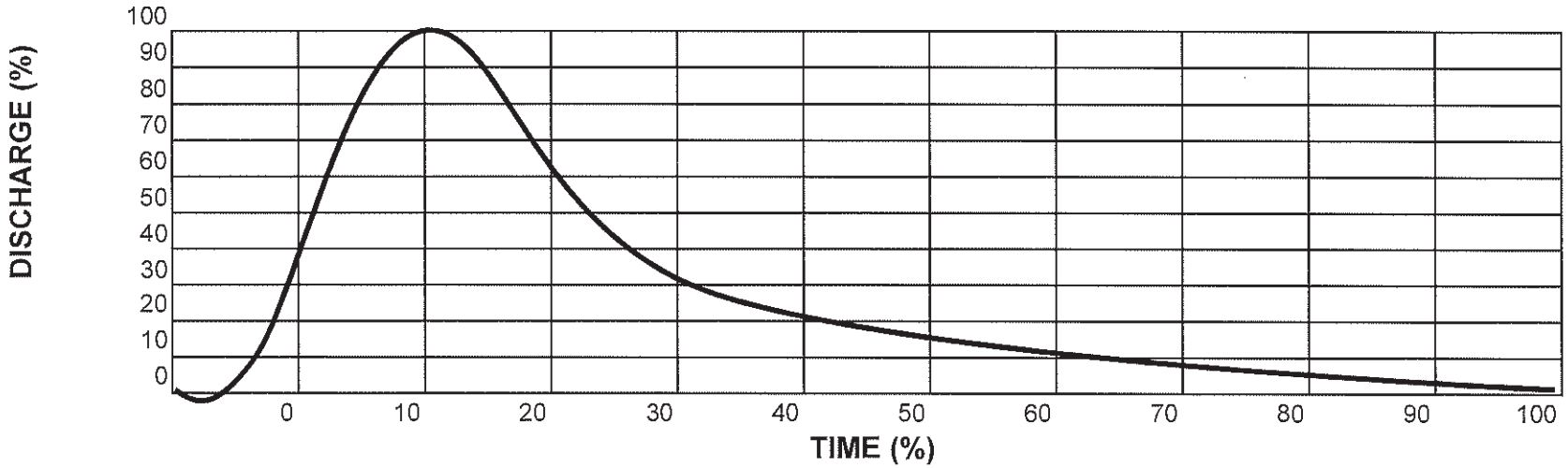
Total Time=Tc*5*60 Tc= 13 x 5 x 60 = 3900

Scale Factor= 1 sq. cm = Q/10 x Time/20

1.652188 x 195 = 322.1766 CF/Sq CM

322.1766 x 58.13 = 18728 CF

58.13 is a constant to convert area under the curve to cubic feet



Appendix 8: Source Control

Pollutant Sources/Source Control Checklist

Appendix 9: O&M

Operation and Maintenance Plan and Documentation of Finance, Maintenance and Recording Mechanisms

Appendix 10: Educational Materials

BMP Fact Sheets, Maintenance Guidelines and Other End-User BMP Information

Educational Materials included with this WQMP are the following:

1. "A citizen's guide to understanding Stormwater" from EPA 833-B-00-002.
2. Stormwater pollution what you should know for "Outdoor Cleaning Activities and Non-point Source Discharges" from CRFC
3. "Tips for a healthy pet and healthier environment" from CRFC.
4. CASQA Handouts

SD-10 Site Design & Landscape Planning

SD-11 Roof Runoff Controls

SD-12 Efficient Irrigation

SD-13 Storm Drain Signage

SC-10 Non-Stormwater Discharges

SC-41 Building and Grounds Maintenance

SC-43 Parking/Storage Area Maintenance

SC-44 Drainage System Maintenance

TC-11 Infiltration Basin