EXHIBIT G

City of Imperial

FINAL

MITIGATED NEGATIVE DECLARATION

State Clearinghouse No. 2017011001

FOR

RUSSELL COURT SUBDIVISION

Annexation, General Plan Amendment, and Pre-Zone

Certified by City Council via Resolution No. 2017-07 on April 19, 2017

Prepared by:

The Holt Group

TABLE OF CONTENTS

EXHIBITS

LIST OF TABLES

APPENDICES

Appendix F - Hydrology Report

Appendix G - Noise Study

Appendix H - Imperial Service Area Plan

Appendix I - Traffic Study

SECTION 1.0 - INTRODUCTION

1.1 Purpose and Overview of the CEQA Process

Public agencies are tasked with the duty to avoid or minimize environmental degradation when analyzing development projects. This Mitigated Negative Declaration (MND) assesses the impacts of the proposed Russell Court Subdivision. All "projects" within the state of California are required to undergo an environmental review to determine the environmental impacts associated with implementation of the project in according with the California Environmental Quality Act (CEQA). CEQA was enacted in 1970 by the California Legislature to disclose to decision-makers and the public the significant environmental effects of proposed activities and the way to avoid or reduce the environmental effects by requiring implementation of feasible alternatives or mitigation measures. CEQA applies to all California government agencies at all levels, including local agencies, regional agencies, and state agencies, boards, commissions, and special districts. As such, the City of Imperial is required to conduct an environmental review to analyze the potential environmental effects associated with the proposed project. The City of Imperial is the lead agency, for the preparation of the Initial Study/Mitigated Negative Declaration (IS/MND), for any proposed project, in accordance with CEQA.

1.2 Preparation of the MND

The preparation of an MND is guided by a specific set of laws and guidelines. In accordance with the CEQA Guidelines, the City of Imperial shall prepare a MND for a project subject to CEQA when:

a) The Initial Study (IS) shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
b) The Initial Study identifies potentially significant effects, but:

    1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
    2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.[1]

The IS prepared by the City of Imperial on the proposed project determined that the project would require the preparation of a MND. The MND has been prepared in conformance with the requirement of CEQA (Public Resources Code 21000 et seq.), the State CEQA Guidelines (California Code of Regulations, Section 15000 et seq.), and the rules, regulations and procedures for implementation of CEQA as adopted.

[1] California Environmental Quality Act (CEQA), California Code of Regulations (CCR), §§15070, 2009.

1.3 Scope of the MND

This MND is being prepared to analyze environmental impacts related to the approval of the proposed Russell Court Subdivision. For the purposes of this document, "the project" is the Russell Court Subdivision, Annexation, Pre-Zone and General Plan amendment for the purpose of accommodating 130 single family dwelling units, sixty-six (66) apartment units, and a single family development. Under CEQA Guidelines, the MND shall include the following:

a) A brief description of the project, including a commonly used name for the project, if any;
b) The location of the project, preferably shown on a map, and the name of the project proponent;
c) A proposed finding that the project would not have a significant effect on the environment;
d) An attached copy of the Initial Study documentation reason to support the finding; and
e) Mitigation measures, if any, including in the project to avoid potentially significant effects.[2]

The Initial Study/Environmental Checklist Form for this project is included in **Appendix A** of this MND. Based on the Initial Study/Environmental Checklist Form, Air Quality, Biological Resources, Geology/Soils and Traffic and Transportation were anticipated to have a potentially significant impact necessitating further discussion. This draft MND discusses these areas further and has resulted in additional mitigation measures as discussed under each respective section and under **Section 5**, the **Mitigation and Monitoring Program**.

1.4 Authority to Prepare a Mitigated Negative Declaration

The City of Imperial will act as the lead agency pursuant to Section 15051 of the State CEQA Guidelines and is responsible for the planning and implementation of the proposed project. The Imperial County Local Agency Formation Commission is the Co-Lead for the purpose of annexing the affected area into the jurisdiction of the City of Imperial. The Local Agency Formation Commission (LAFCo) establishes policies regarding the reorganization and service delivery of cities and special districts, and approves boundary changes proposed by any governmental agency. Land Use decisions affecting service demand will need to be satisfactorily addressed under the City's Service Area Plan prior to annexation approval. Other agencies with authorities are as follows:

Imperial County-The Imperial County General Plan provides policies for the entire County, whereas, the Imperial County Zoning Ordinance regulates land uses. The Imperial County General Plan and Zoning Ordinance currently regulate the project area. Additionally, Imperial County will need to enter into a Tax Share Agreement with the City of Imperial in order to finalize the annexation.

[2] California Environmental Quality Act (CEQA), California Code of Regulations (CCR), §15071, 2009.

Imperial County Airport Land Use Commission (ICALUC)–The purpose of the Imperial County Airport Land Use Commission is to protect public health, safety, and welfare by ensuring that proposed development in the vicinity of airport properties are compatible with airport activities. The Airport Land Use Compatibility Plan is used to fulfill their responsibility and was last revised in June 1996. To ensure the development of land surrounding the Imperial County Airport is compatible with the airport use, the Plan establishes Compatibility Zones for areas surrounding the Airport. Potential impacts, land use consistency, and development restrictions as specified in the Airport Land Use Compatibility Plan were consulted during the development of this MND.

Imperial County Air Pollution Control District (ICAPQD)–The City of Imperial is located within the Salton Sea Air Basin (SSAB) and subject to regulations from the California Air Resources Board (CARB) and the Imperial County Air Pollution Control District (APCD). The Imperial County Air Pollution Control District serves as the regional agency dealing with air pollution in the Imperial Valley area and has the responsibility for the implementation of the California Clean Air Act. The ICAPCD has a CEQA Air Quality Handbook, adopted in 2007, which was also taken into consideration during the preparation of this MND.

Imperial Irrigation District (IID)–The Imperial Irrigation District has local surface water rights and water supply contracts serving the City of Imperial and the project area. The Imperial Irrigation District (IID) maintains approximately 1,600 miles of irrigation drainage structures for surface water runoff and subsurface drainage from agricultural fields. The drainage system is intended for agricultural drainage, and as such, the IID restricts the quantity and quality of runoff discharged onto its systems.

Imperial Unified School District– The project site is located within the Imperial Unified School District. There are currently two elementary schools (Ben Hulse Elementary and TL Waggoner Elementary School), one middle school (Frank Wright Middle School) and one high school (Imperial High School) in addition to one alternative education school (Holbrook School). Determination of student capacity and service demand was considered during the preparation of this MND. In turn, the School District is able to plan for growth as it is entitled to the payment or satisfaction of a fee, charge, or other required levies imposed pursuant to Government Code §65995-65998 as mitigation of impacts resulting from, but not limited to, the planning, use, or development of real property.

The following agencies will be responsible for taking certain actions regarding the proposed Russell Court Subdivision, Annexation, Pre-Zone and General Plan Amendment:

1) **Imperial County Airport Land Use Commission**: reviews the General Plan and makes a determination of consistency with the adopted Airport Land Use Compatibility Plan.
2) **City of Imperial Planning Commission**: after holding a public hearing recommends approval of the project to City Council. The Commission also considers a resolution to recommend certification of the draft MND for the same.
3) **City of Imperial City Council** ("lead agency" and "legislative body") holds a second public hearing, considers certification of the MND and considers an ordinance approving and adopting the Annexation, General Plan Amendment and Pre-Zone contingent upon LAFCo approval.
4) **Imperial County and the City of Imperial** review and consider a Tax Share Agreement for the annexed property.
5) **The Imperial County Local Agency Formation Commission** (LAFCo) will approve and record the proposed annexation.

1.5 Public Review

The MND is intended to provide information to the public regarding the potential short term and long term impacts related to the project and to focus on the potential impacts of the proposed project of any secondary effects that may be expected from an approval. In accordance with CEQA and State CEQA Guidelines, a 30-day public review period for the project will be necessary. The comment period commenced on December 15, 2016 and will concluded on January 16, 2017. Early consultation letters were sent to potentially affected and/or interested agencies on August 15, 2016 and any comments received were taken into consideration during the preparation of the draft MND. This MND has been distributed to interested or involved local and regional public agencies, organizations and private individuals for review. In addition, the MND has been sent to the State Clearinghouse for agency distribution and further made available for general public review at City of Imperial City Hall. City Hall is located at 420 South Imperial Avenue, Imperial, CA 92251. Copies are also available during regular business hours at The Holt Group, Inc, 1601 N. Imperial Avenue, El Centro, CA 92243 or by appointment; please call (760) 337-3883.

During the 30-day public review period, members of the public, interested agencies and organizations are encouraged to provide written comments on the information contained within this MND. These comments will then be addressed, where applicable, and incorporated into a Final MND. The City of Imperial will use the MND for environmental decisions related to this proposed project.

In reviewing this MND, affected public agencies and interested members of the public should focus on the sufficiency of the document in identifying and analyzing potential project-related impacts on the environment, and ways in which the significant effects of the project could be avoided or mitigated. Written comments on the MND should be submitted in writing prior to the end of the 30-day public review.

Written comments should be submitted to:

Jorge Galvan
Planning Director
City of Imperial
420 South Imperial Avenue
Imperial, CA 92251

With Copies to:

Justina G. Arce
The Holt Group, Inc
1601 North Imperial Avenue
El Centro, CA 92243

1.6 Mitigated Negative Declaration Format

This document contains the following sections:

- **Section 1, Introduction** – This section describes the purpose of the MND and the required public review and scoping period for the MND.
- **Section 2, Project Description** – This section provides a detailed description of the proposed project, including project objectives and characteristics.
- **Section 3, Proposed Findings of No Significant Impact** – This section analyzes the environmental factors that were deemed potentially significant in the Initial Study and identifies mitigation measures to lessen any impacts to a less than significant level.
- **Section 4, Mandatory Findings of Significance–** Identifies any environmental factors potentially affected.
- **Section 5, Mitigation & Monitoring Program** – This section identifies all mitigation measures that will be imposed on the project to reduce all potential environmental impacts to a less than significant level and responsible parties for implementation.

SECTION 2.0 - PROJECT DESCRIPTION

2.1 Project Introduction

Shine Real Estate Investment, Inc. is proposing development of a residential subdivision on the westerly side of the City of Imperial within an unincorporated area of Imperial County. The development proposes multiple densities of residential within this Russell Court Subdivision (Project). The Russell Court Subdivision will include 130 single family residential units, 66 apartments and one single family home on a .68-acre lot. The areas immediately abutting the subject property are largely developed with residential land uses, or planned for residential land uses, and thus the proposed project would complement the existing and planned environment.

2.2 Project Applicant

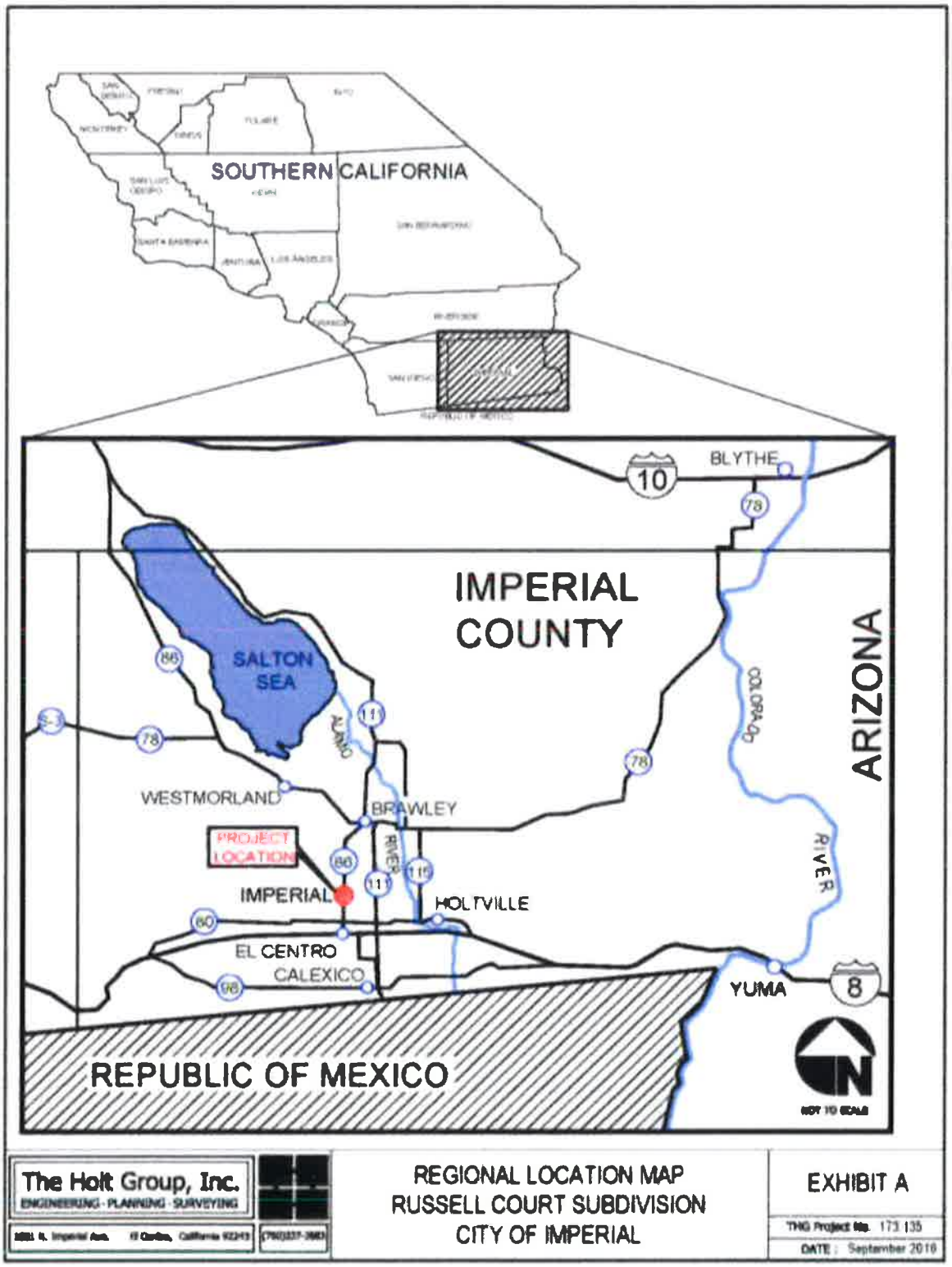
Applicants:
Ray D. Roben Sr; Roben LLC; Stephen J & Vicki L., Urih
341 W. Crown Court
Imperial, CA 92251

Property Owners:
Ray D. Roben Sr; Roben LLC; Stephen J & Vicki L., Urih
341 W. Crown Court
Imperial, CA 92251

2.3 Background

Located in Imperial County and incorporated in July 12, 1904, the City of Imperial encompasses approximately 5.85 square miles. Please See **Exhibit A-Regional Location**. In 2016, the City of Imperial had an estimated population of 18,165 per the California Department of Finance and it is projected that by 2035 the City's population will be 22,900 (Source: Southern California Association of Governments). State Route 86, serves the entire Imperial County, traverses the City of Imperial, at a north/south orientation and functions as the Town's main arterial. The City of Imperial is one of the fastest growing communities in California. The City of Imperial's growth can be attributed to various reasons, including a centralized location in comparison to other communities, diverse availability of new residential homes at affordable prices and serviced with good schools. The Russell Court Subdivision is anticipated to generate a population of 660 consistent with 3.35 persons per household (pphh Source: City of Imperial Service Area Plan 2015). The City of Imperial strongly supports housing developments similar to what is proposed under the Russell Court Subdivision.

Exhibit A–Regional Location



2.4 Project Need & Objectives

Enacted in 1969, the Housing Element Law mandates that local governments adequately plan to meet the existing and projected housing needs of all economic segments of the community. The purpose of the law is to ensure that every jurisdiction establishes policies, procedures and incentives in its land use planning and redevelopment activities that will result in the maintenance and expansion of the housing supply to adequately house households currently living and expected to live in the jurisdiction.

The Southern California Association of Government's (SCAG) is the responsible entity for preparing the Regional Housing Needs Assessment (RHNA) in Imperial County. The RHNA is mandated by State Housing Law. In essence, the RHNA quantifies the need for housing within each jurisdiction during specified planning periods. In 2012, the regional share of housing needs allocated to the City of Imperial was 1,309 new units over the 8 year planning period.

Housing development projects similar to the Russell Court Subdivision are necessary in order to meet these housing objectives. The applicant is proposing to subdivide, annex and develop the site with varying density residential units. Although the Russell Subdivision Area is located within the County of Imperial, it is located within the Sphere of Influence of the City of Imperial and Annexation into the City of Imperial is necessary prior to development and furtherance of the aforementioned objective.

2.5 Project Location & Surrounding Uses

The proposed residential subdivision and annexation project consists of a 30 acre site, in an unincorporated area of Imperial County abutting the City of Imperial at the north-west corner of Brewer Road and Nance Road. The project site is more specifically described as Assessor's Parcel Numbers: 064-013-003, 064-020-043, 064-013-004, and 064-254-084, 064-254-085; 064-254-086; 064-254-087; and 064-254- 088. There are three development areas among these parcels: **Area 1** (130 R-1 Single Family Dwelling Units); **Area 2** (one R-1 Single Family Dwelling) and **Area 3** (66 RA Apartment Units).

The subject site is vacant undeveloped land with weedy ruderal vegetation. Existing land uses surrounding the site are residential land uses in varying lower densities. To the west is the Single Family Residential Subdivision known as Savannah Ranch, to the north east and south is low density residential and isolated rural residential land uses. The site is proposed to be accessed from three points, the apartments from Worthington Road which immediately abuts the site to the north and for the single family subdivision from Nance Road which borders the site to the east and from Brewer Road which abuts the site to the south. Please See **Exhibit B-Vicinity Map and Photos.**

Exhibit B–Vicinity Map and Photos

Site Photos

Area 1 – 130 Unit Single Family Subdivision

Photo 1a-View from Brewer Road between Nance Road & Mirador Street facing north.

Photo 1b-View from Brewer Road between Nance Road and Mirador Street facing northwest.

Area 2 - Single Family Residence

Photo 2a- View from Intersection of Nance Road & Worthington Road facing southeast.

Photo 2b-View from Worthington Road between Nance Road & La Brucherie Road facing south.

Area 3 - 66 Apartment Units

Photo 3a- View from Worthington Road between Nance Road & North Central Drain Two facing south.

Photo 3b- View from Worthington Road between Nance Road & North Central Drain Two facing south.

2.6 Project Description

The project proposes to subdivide the thirty acres of land into three residential areas. This Mitigated Negative Declaration will consider 130 single family residential units, 66 apartments, and one single family home on a .68 acre lot. Additionally, the applicants propose to pre-zone and annex said subdivision into the City of Imperial from an unincorporated area of Imperial County. The project will require a pre-zone, and general plan amendment from Residential Low Density to ~~Single Family Residential~~ Low Medium Density Residential and ~~Residential Apartment~~ Multiple Family (Rental) Residential in order to accommodate the R-1 Single Family and RA-Residential Apartment development. Please refer to **Exhibit 2-C Site Plan**. The development will result in an estimated population growth of 660 persons consistent with an estimated 3.35 persons per household. As such, this MND will focus on the environmental effects associated with the proposed residential land uses and density changes.

2.7 Land Use and Zoning

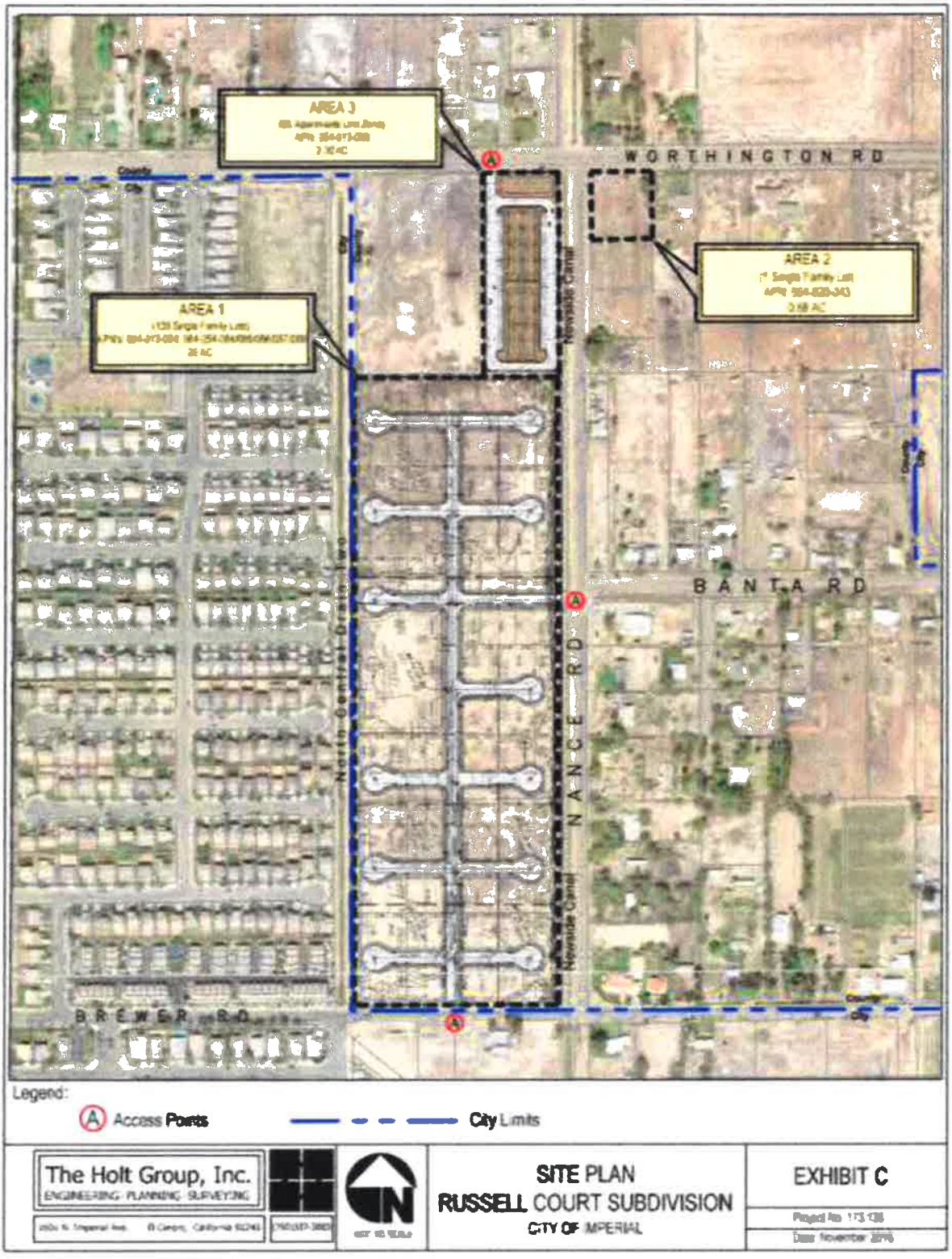
The project site is currently undeveloped land within an unincorporated area of the County of Imperial. The area is zoned A1-L1U by the County of Imperial which is rural residential within an urban overlay. Under this zone, one acre minimum lots with limited agriculture land uses are permitted as per the Imperial County Zoning Ordinance. Per the General Plan of the City of Imperial, the current designation of the land falls in the Residential Low Density category and thus will require a General Plan Amendment in order to accommodate the higher densities of the R-1 Residential Single Family and RA Residential Apartment. Specifically, 26 acres of low density residential are proposed to be increased up to 130 lots of ~~residential single family~~ Low Medium Density Residential, 3.3 acres of low density residential are proposed to be converted to ~~residential apartment~~ Multiple Family (Rental) Residential accommodating 66 units, and a .68 acre lot is proposed to remain as residential low density.

2.8 Requested Actions

Actions needed for the project's entitlement fall under the responsibility of the City of Imperial with a concurrent annexation approval from the Imperial County Local Agency Formation Commission. Requested Actions for the project's entitlement are as follows:

- Approval and Certification of the Mitigated Negative Declaration
- Approval of General Plan Amendment and Pre-Zone
- Approval of Tentative Tract Map
- Approval of Annexation and Tax Share Agreement
- Approval of Zoning Text Amendment
- Approval of Variance

Exhibit C – Site Plan



SECTION 3.0 - PROPOSED FINDINGS OF NO SIGNIFICANT IMPACT

The City of Imperial prepared an Initial Study and Environmental Checklist for the proposed project in conformance with CEQA Guidelines. This section of the Draft Mitigated Negative Declaration (MND) discusses environmental issues identified in the Initial Study as having potential impacts to the environment. The MND further incorporates any other relevant issues brought forward by comments received during the early consultation period. The final document will further address any issues that may have been raised during the public review comment period, after the Notice of Availability and Intent to Adopt A Mitigated Negative Declaration is circulated. The City of Imperial Environmental Evaluation Committee (EEC) determined that the proposed project could have a potential significant impact on the following environmental factors: Air Quality, Biological Resources, Geology/Soils, Hazards, Hydrology and Water Quality, Noise, Transportation/Traffic, and Service Systems. The proposed project has incorporated significant measures to reduce or avoid these potential impacts to a level less than significant.

3.1 Environmental Factors Potentially Affected

The following sections present an analysis of each of the areas found to have a "potentially significant impact," as determined through the Initial Study/Environmental Checklist. Included is a discussion of the existing conditions, significance criteria, identification of potential impacts and mitigation measures to be imposed as part of the project to bring the potential impacts to a level below significance. These mitigation measures have been incorporated as a part of the proposed project.

- **Air Quality**-Mitigation Measures AQ-1; AQ-2;
- **Biological Resources**-Mitigation Measures BIO-1; BIO-2;
- **Cultural Resources**-Mitigation Measure C-1;
- **Geology/Soils-** Mitigation Measures GS-1; GS-2; GS-3;
- **Hazards-** Mitigation Measures HZ-1; HZ-2;
- **Hydrology and Water Quality-** Mitigation Measures HQ-1; HQ-2; HQ-3; HQ-4;
- **Land Use and Planning-** Mitigation Measures LU-1;
- **Noise-** Mitigation Measures N-1;
- **Public Services-** Mitigation Measures PS-1;
- **Transportation & Traffic-** Mitigation Measures T-1; T-2; T-3

3.1.1 Air Quality

This section evaluates the air quality impacts associated with the proposed project and identifies mitigation measures to reduce potentially significant impacts. The information in this section is based on an Air Quality Analysis prepared by TRC Solutions in March 2016 and included as **Appendix B** of this MND.

The State of California and the Federal government have established air quality standards and emergency episode criteria for various pollutants. These standards are used to determine attainment of State and Federal air quality goals and plans. Generally, State regulations have stricter standards than those at the Federal level. Air quality standards are set at concentrations which provide a sufficient margin of safety to protect the public health, safety and general welfare. Episode criteria define air pollution concentrations at the level where short term exposure may begin to affect the health of a portion of the population especially susceptible to pollutants. The health effects are progressively more severe and widespread as pollutant concentrations increase. Air pollution forms either directly or indirectly from pollutants emitted from a variety of sources. These sources can be natural or human generated.

Air Quality Setting & Existing Conditions

The Project site is located within the Salton Sea Air Basin (SAAB). The climate of Imperial County is characterized as semi-arid desert with hot, dry summers and warm winters. Temperatures in the basin exceed 100 degrees Fahrenheit on the average for four months of the year, with daily highs near 100 degrees Fahrenheit during July and August. During the winter season, daytime highs are mild, with early morning lows around 40 degrees Fahrenheit. The SSAB averages between three and seven inches of precipitation per year. Precipitation in the project's vicinity averages between 2.5 and 3.0 inches annually with the majority of the precipitation occurring between August and March. The Imperial County Air Pollution Control District (IC APCD) is responsible for ensuring that all State and federal ambient air quality standards are achieved and maintained within the Imperial Valley.

Air Quality is measured based upon ambient air quality standards. National Ambient Air Quality Standards (NAAQS) are established by the USEPA for criteria pollutants, including: Ozone (O3), carbon monoxide (CO), nitrogen oxide (NO2), sulfur dioxide (SO2), particulate matter equal to or less than 10 microns in diameter (PM10) and 2.5 microns in diameter (PM2.5) and lead (Pb). These standards are the levels of air quality that are considered safe to protect the public health and welfare.

Examples of sources and effects of the criteria pollutants are identified below:

- **Carbon Monoxide (CO)** – Carbon monoxide is a colorless, odorless, tasteless and toxic gas resulting from the incomplete combustion of fossil fuels. CO interferes with the blood's ability to carry oxygen to the body's tissues and results in numerous adverse health effects. CO is a criteria pollutant.

- **Oxides of Sulfur (SO_x)** - Typically strong smelling, colorless gases that are formed by the combustion of fossil fuels. SO_2 and other sulfur oxides contribute to the problem of acid deposition. SO_2 is a criteria pollutant.
- **Nitrogen Oxides (Oxides of Nitrogen or NO_x)** - Nitrogen Oxides (NO_x), nitrogen dioxide (NO_2) and nitrous oxide (N_2O) are formed when Nitrogen (N_2) combine with Oxygen (O_2). Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide to 170 years for nitrous oxide. Nitrogen oxides are typically created during combustion processes and are major contributors to smog formation and acid deposition. NO_x is a criteria pollutant and may result in numerous adverse health effects. It absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility.
- **Ozone (O_3)** - Ozone (O_3) is a strong smelling, pale blue, reactive toxic chemical gas consisting of three oxygen atoms. It is a product of photochemical processes involving the sun's energy. Ozone exists in the upper atmosphere ozone layer as well as at the earth's surface. Ozone at the earth's surface causes numerous adverse health effects and is a criteria air pollutant. This pollutant is a major component of smog.
- **PM_{10} (Particulate Matter Less than 10 microns)** - PM_{10} is a major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes and aerosols. The size of the particles (10 microns or smaller, about .0004 inches or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. PM_{10} also causes visibility reduction and is a criteria air pollutant.
- **$PM_{2.5}$ (Particulate Matter Less than 2.5 microns)** - $PM_{2.5}$ is a similar air pollutant consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include sulfates from SO_2 release from power plants and industrial facilities and nitrates that are formed from NO_x release from power plants, automobiles and other types of combustion sources. The chemical composition of the fine particles highly depends on location, time of year and weather conditions. $PM_{2.5}$ is a criteria pollutant.
- **Volatile Organic Compounds (VOC's)** - Volatile organic compounds are hydrocarbon compounds (any compound containing various combustions of hydrogen and carbon atoms) that exist in the ambient air. VOC's contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form ozone to the same extent when exposed to photochemical processes. VOC's often have an odor; some examples include gasoline, alcohol and the solvents used in paints.

- **Reactive Organic Gasses (ROG)** - Similar to VOC, Reactive Organic Gasses (ROG) are also precursors in forming ozone and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and nitrogen oxides react in the presence of sunlight. ROG's are a criteria pollutant since they are a precursor to O_3 which is a criteria pollutant.
- **Greenhouse Gases (GHG's)** - Many chemical compounds found in the Earth's atmosphere act as GHG's, including, water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_20), chloroflourocarbons (CFC's), hydroflourcarbons (HFC's), perfluorocarbons (PFC's) and sulfur hexafluoride (SF_6). When sunlight strikes the Earth's surface, some of it is reflected back towards space as infrared radiation (heat). GHG's absorb this infrared radiation which results in more heat trapped in the Earth's atmosphere. Over time, the amount of energy sent from the sun to the Earth's surface should be approximately equal to the amount of energy radiated from Earth back into space, leaving the Earth's surface temperature roughly constant. The accumulation of GHG's is causing global climate change, as these gases are trapping additional heat within the Earth's atmosphere. The Earth's average surface temperature has risen by 0.3 to 0.6 degree Celsius over the past century affecting agriculture, water supply, pests and diseases, sea-level, polar ice caps/glaciers, and biology/ecosystems.

The EPA under the Federal Clean Air Act of 1970 (amended in 1977) established ambient air quality standards for these pollutants. This standard is called the National Ambient Air Quality Standards (NAAQS). The California Air Resources Board (CARB) subsequently established the more stringent California Ambient Air Quality Standards (CAAQS). Areas in California where ambient air concentrations of pollutants are higher than the State standard are considered to be "non-attainment" status for that pollutant. The Imperial Valley is designated as a "non-attainment" area with respect to Federal Standards for both Particulate Matter (PM10) and Ozone (smog).

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others. The California Air Resources Board (CARB) has identified groups of people who are most likely to be affected by air pollution including children under 14, individuals over the age of 65, athletes and people with cardiovascular and chronic respiratory diseases. Locations that may contain a high concentration of these groups identified as sensitive receptors include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools and parks. There are a number of sensitive receptors located within ½ mile of the project site including residential uses, an elementary school and a park.

Global Climate Change

On September 27, 2006, AB 32, the California Global Warming Solutions Act of 2006, was enacted by the State of California. AB 32 caps California's GHG emissions at 1990 levels by 2020. AB 32 charges the California Air Resources Board (CARB) to monitor and regulate sources of GHG emissions (consisting of CO2, CH4, N2O, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride) in order to reduce those emissions. California Senate Bill (SB) 97, passed August 2007, is designed to work in conjunction with AB 32 and CEQA. SB 97 requires that the California State Office of Planning and Research (OPR) prepare and develop proposed guidelines for the feasible mitigation of GHG emissions by July 1, 2009. While the guidelines for GHG emissions have not yet been adopted by the OPR, and thus, GHG emissions are not regulated by the State of California (or the federal EPA), once adopted, the GHG emissions guidelines would apply retroactively to any CEQA environmental document not yet certified or adopted by a CEQA lead agency.

In June 2008, OPR released its Technical Advisory on CEQA and Climate Change. This Technical Advisory offers informal guidance regarding the steps lead agencies, professional planners, land use officials, and CEQA practitioners should take to address climate change in their CEQA documents in the absence of formally adopted guidelines. According to the Technical Advisory, lead agencies must determine whether greenhouse gases may be generated by a proposed project, and if so, GHG emissions must be quantified by type and source. Secondly, the agency must assess whether those emissions are individually or cumulatively significant. If they are considered significant, then the agency must investigate and implement ways to avoid, reduce, or otherwise mitigate the impacts of those emissions.

Greenhouse Gas in Imperial County

Emission of greenhouse gasses occurs through many methods and activities such as burning of fossil fuels, through solid waste, as a result of chemical reactions, from livestock and other agricultural practices and by the decay of organic waste. The Imperial County has demonstrated some signs of unwanted air quality measures through the past years. Even though such quality measures have been getting better as time progresses, they are still alarming to local jurisdictions. For example, signs of sulfur dioxide and carbon monoxide have been present in the air. Nitrogen Dioxide as well as Ozone have also been present in the Imperial County over the years. Imperial County is susceptible to such harms because of the activities that come along the agricultural processes.

There are five air monitoring stations within the Imperial County located in Westmorland, Brawley, El Centro, Niland, and Calexico. The Calexico station is operated by the California Air Resources Board (CARB), and the remaining four stations are operated by ICAPCD. These air monitoring stations have produced significant data regarding pollutant parameters about several gases that are harmful to the air quality measure such as sulfur dioxide, carbon monoxide, nitrogen dioxide, and ozone. The measurement of ozone in

the Imperial County has surpassed the national standard in several occasions. For example, in 2007 it was above national standard for 27 days in the entire year. Most recently, those numbers of days have been decreasing but still remain as an important measure to consider.

Air Quality Significance Criteria

Per State CEQA Guidelines, the proposed project would have an effect on the environment, if any of the following occur:

- A conflict or obstruction of the implementation of the applicable Air Quality Management Plan (AQMP) or applicable portions of the State Implementation Plan (SIP);
- A violation of any air quality standard or substantial contribution to an existing or projected air quality violation;
- A cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under (PM10) or increase of quantitative thresholds for Ozone (O3) precursors, oxides of nitrogen (NOx) and reactive organic compounds (ROCs);
- Exposure to sensitive receptors (including, but not limited to, schools, hospitals, resident care facilities, or day-care centers) to substantial pollutant concentrations;
- Creation of objectionable odors affecting a substantial number of people; or
- Result in an impact to Global Climate Change.

In addition, project impacts would be significant if they exceeded the following California standards for localized carbon monoxide (CO) concentrations:

- 1-hour CO standard of 20.0 parts per million (ppm)
- 8-hour CO standard of 9.0 ppm

Air Quality Impact Analysis

To determine whether a project would result in a violation of an air quality standard or contribute substantially to an existing or projected violation, it is necessary to review the quantitative emission thresholds adopted by the ICAPCD in the ICAPCD CEQA Air Quality Handbook, November 2007 for construction and operation related activities, both of which are addressed as follows.

Construction Related Emission Impacts

The Imperial County Air Pollution Control District CEQA Air Quality Handbook set forth emission thresholds for project construction related activities as described on the **Table AQ-1 Maximum Daily Emissions**. It is important to note, however, that the ICAPCD CEQA guidelines take a qualitative approach to analyzing construction emissions. As opposed to quantifying construction emissions, ICAPCD recommends the implementation of mitigation measures specified within the guidelines. These mitigation measures are also codified in ICAPCD Regulation VIII - Fugitive Dust Rules.

TABLE AQ-1
Maximum Daily Emissions Thresholds

MAXIMUM DAILY EMISSIONS THRESHOLDS	
Pollutant	Construction
NO_x	100 lbs/day
ROG	75 lbs/day
PM_{10}	150 lbs/day
CO	550 lbs/day

Source: ICAPCD CEQA Air Quality Handbook, 2007

Project construction emissions were modeled using CalEEMod and compared to ICAPCD thresholds. Construction activities associated with the proposed project will result in emissions of CO, ROG NO_x, SO_x, PM_{10}, and $PM_{2.5}$. Construction related emissions are expected from the following activities: mass grading, trenching, paving, building construction, architectural coatings, and construction worker commutes.

Mass Grading

Exhaust emissions from grading activities result from both on-road and off-road heavy equipment operating during this phase of construction. It was assumed based on a similar project that the following pieces of equipment will be used during the grading phase of construction: excavator, grader, rubber tired dozers, scrapers, tractors, loader, backhoes, and water trucks. Dust is typically a major concern during grading activity and are typically called, "fugitive emissions." Emissions rates vary as a function of many parameters which include soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation.

Trenching/Underground and Paving

Trenching/Underground and Paving activities include the movement of any remaining material for installation of pipelines as well as necessary curb and gutter work, road base material placement and blacktop. Construction equipment will likely include the following: excavators, general industrial equipment, tractor/loader, paver, paving equipment and rollers.

Building Construction

Building Construction activity will result in emissions from heavy equipment that will be operational during physical building construction. This activity is expected to last for approximately two years. Building construction equipment will likely include the following: forklifts, cranes, generator sets and tractors. The application of architectural surface coating (painting) generates VOC emissions when organic solvents in the coating evaporate as the coating dries.

Construction-Related Diesel Emissions

Diesel particulate matter is considered carcinogenic by California regulatory agencies, and it is recognized that sensitive receptors exposed to high concentration of diesel particulate matter for many years of duration could experience a significant cancer risk (based on a 70-year exposure period). Project related construction activities are sporadic and once construction activity is complete, emissions are no longer emitted. Because the duration of exposure to diesel exhaust during the temporary construction projects will be over a trivial period in comparison, no significant exposure is anticipated.

Construction Trips/Commute

Construction emissions for construction worker vehicles traveling to and from the project site would contribute to vehicular emissions, which generally assume 1.25 construction workers for each piece of equipment. Emissions from delivery of material and supplies are also a contributing factor.

Odor Emissions During Construction

The project itself is not a potential source for odors with the exception of temporary odors associated with the construction equipment exhaust and architectural coatings during construction activities. Standard construction requirements would minimize odor impacts resulting from construction activity. It should be noted that any construction odor emissions generated would be temporary and intermittent in nature and would cease upon completion of the respective phase of construction activity and is thus considered less than significant.

The anticipated levels of emissions during the construction period of the proposed project are anticipated to have a less than significant impact due to their temporary nature anticipated to be two years and not to exceed 26 months. The peak daily emissions for construction of each area are noted in **Table AQ-2 Project Construction Related Emissions**. Although it is unlikely that the peak emissions will occur all at one time, the table demonstrates the worst case scenario. Construction emissions are not expected to exceed the thresholds established by the ICAPCD, the project must comply with ICAPD's mandatory Rule VIII to ensure that adequate air quality is maintained during heavy construction activities and to reduce the risk of exposure of sensitive receptors to substantial pollutant concentrations.

AQ-2

Project Construction Related Emissions

Source: TRC Solutions, Inc. 2016

	ROG	NOX	CO	SO2	PM10	PM2.5
Area 1 (130 R-1 Units)	42.0	51.1	39.0	0.1	9.2	5.5
Area 2 (1 R-1 Unit)	2.4	10.6	10.6	0.0	0.8	0.6
Area 3 (66 Apartments)	23.1	34.5	24.4	0.0	9.2	5.5
Project Peak Daily Emissions	67.7	96.3	74.0	0.1	19.2	11.5
Thresholds	75	100	550	-	150	-

Operational Emissions Impacts

The ICAPCD has also published guidelines for the implementation of CEQA with respect to operational air quality. ICAPCD uses a tiered approach. Projects with emissions estimated under the specified thresholds are considered Tier I, and have a less than significant level of impact. Projects with emissions above this threshold are considered Tier II, have significant impact, and require a Comprehensive Air Quality Analysis Report. A summary of these thresholds of significance is provided in **Table AQ-3- Operation Emissions Thresholds**.

Table AQ-3

Operation Emissions Thresholds

MAXIMUM DAILY EMISSIONS THRESHOLDS		
Pollutant	**Tier 1 Operational**	**Tier 11 Operational**
NO_x	Less than 55 lbs/day	55 lbs/day or more
ROG	Less than 55 lbs/day	55 lbs/day or more
PM_{10}	Less than 150 lbs/day	150 lbs/day or more
$PM_{2.5}$	55 lbs/day	TBD
SO_x	Less than150 lbs/day	150 lbs/day or more
CO	Less than 550 lbs/day	550 lbs/day or more

Source: TRC Solutions, Inc. 2016

Most emissions associated from the operation of the proposed project will be a direct result from mobile sources with a few exceptions. Specifically, operational activities associated with the proposed project will result in emissions of ROG, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. Operational emissions took into consideration area, energy, mobile, waste, and water sources as considered by CalEEMod. Operational emissions would be expected from the following equipment and activities: vehicle emissions, fugitive dust related to vehicular travel, combustion emissions associated with natural gas use, emissions from consumer products, landscape maintenance equipment emissions, and architectural coatings.

Table AQ-4
Project Operating Emissions

	ROG	NOX	CO	SOx	PM10	PM2.5
Area 1 (130 R-1 Units)	15.9	14.2	70.5	0.1	5.5	2.3
Area 2 (1 R-1 Unit)	0.1	0.1	0.5	0.0	0.0	0.0
Area 3 (66 Apartments)	3.8	4.9	23.7	0.0	1.6	0.5
Total Project Emissions	19.8	19.2	94.7	0.1	7.1	2.8
Tier I Thresholds	55	55	550	150	150	-

Source: TRC Solutions, Inc. 2016

Land Use Planning and Reduction of Greenhouse Gas Emission Impacts

Land uses such as those with higher densities proposed for under the project impact air quality predominantly through emissions associated with vehicular travel. Project operational (vehicular) impacts are dependent on both overall daily vehicle trip generation and the effect of the project on peak hour traffic volumes and traffic operations in the vicinity of the project. Allowance of the higher densities reflect a proactive effort to reduce vehicle miles traveled by concentrating housing within urban built environmental instead of encouraging urban sprawl necessitating travel at further distances. These measures by extension affect greenhouse gas emissions through land use and transportation. The proposed Project will result in an estimated 197 additional households that would have otherwise been accommodated under existing densities. The project will include a finely-connected transportation network, reduced lot sizes to accommodate more dwelling units, thus, increasing compactness and diversifying the land uses within the specific plan area and locating housing near City services.

Connectivity – According to the CEQA & Climate Change document entitled, "Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act," prepared by the California Air Pollution Control Officers Association (CAPCOA), a finely-connected transportation network reduces trip length and creates the framework for a community where homes and destinations are close in proximity and along direct routes. The Russell Court Subdivision has direct access to the existing a transportation network and incorporates a multi-cul-de-sac internal circulation system of approximately 1.04 miles to serve the 130 single family homes and only 890 lineal feet to serve the apartment development. Elementary and High Schools are both located within ½ a mile. This design and location optimizes vehicle miles travelled and encourages students to walk to school.

Compactness – Compact development, by its nature, can increase the efficiency of infrastructure provision. If communities place the same level of activity in a smaller space, GHG emissions would be reduced concurrently with vehicle miles traveled and avoid

unnecessary conversion of open space.[3] The Russell Court development proposes to significant increase in densities from 60 dwelling units allowed under the current land use of residential low density to 197 dwelling units proposed to be developed, and under which the proposed General Plan Amendment and Pre-Zone could accommodate up to 260 units.

Diversity – Multiple land use types mixed in proximity around central "nodes" of higher activity land uses can accommodate travel through means other than a car and/or encourages car pools. The Russell Court Subdivision area is designed to include multiple residential densities within close proximity to local schools and the City swimming pool, all of which are within ½ a mile.

Housing and Employment – Most communities assess current and future economic prospects along with long-range land use planning. Part of the objective for many communities is to encourage the coalescence of a labor force with locally available and appropriate job opportunities. Ensuring the provision of jobs near homes further decreases the amount of vehicle miles traveled and leads to a reduction of greenhouse gas emissions. The City of Imperial is home to many important business operations including the California Mid-Winter Fairgrounds, the Imperial County Airport, the Imperial Irrigation District Headquarters and the El Centro Sector Headquarters of the U.S. Border Patrol which contribute to employment opportunities and demand for housing.

Project Related Greenhouse Gas Emissions Analysis and Limitations

Greenhouse gas emissions associated with the development and operation of the proposed project. Emissions sources and categories previously discussed have the potential to generate emissions of CO_2. The Draft CEQA Guidelines 15064.4 (b) (1) states that a lead agency may use a model or methodology to quantify greenhouse gas emissions associated with a project. The lead agency may include a qualitative discussion or analysis regarding the limitations of the particular model or methodology selected for use. Although attempts have been made to accurately and comprehensively quantify the greenhouse gas emission associated with the project, a number of inherent limitations are unavoidable in an emissions inventory of this scope in that it only accounts for emissions of CO_2. Additional limitations are discussed in detail below:

Mobile Source Emissions Calculations Limitations–In order to calculate the emissions that will occur as a result of vehicular activity, a number of assumptions must be made regarding the number of vehicle trips generated by each land use, as well as the distance traveled over the course of each trip. Although the best information available for the number of trips as well as trip lengths was obtained for the project and determined to be 1,692 daily vehicle trips, a number of assumptions must still be made. First, it is likely that not all of the vehicular trips that result from the proposed project will be "new" vehicle trips, but that a majority of these trips were already occurring elsewhere. As previously stated, one of the reasons the site was selected was based on accessibility and proximity to City services, thus possibly reducing

[3] "Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act," California Air Pollution Control Officers Association (CAPCOA), January 2008.

length of vehicular trips. Nonetheless, it is possible that some trip lengths will have increased and others will have decreased as a result of the proposed project. Accordingly, trip lengths were obtained utilizing the assumptions built into the URBEMIS 2007 model for Imperial County which conservatively assumes that trip lengths will remain the same for all of the project and the URBEMIS 2007 emissions inventory model does not differentiate between existing and "new" trips.

Area Source Emissions Calculations Limitations–Additionally, it should be noted that although area source emissions associated with the project have been calculated utilizing the best available data, there are a number of limitations that cannot be avoided in the preparation of these estimates. It should be noted that the URBEMIS 2007 emissions inventory model does not calculate or account for greenhouse gas emissions related to electricity consumption, water usage, and solid waste. The URBEMIS 2007 model account only for natural gas usage as an area source greenhouse gas generator. A summary of the project's GHG emissions are presented on **Table AQ-5 – Total Greenhouse Gas Emissions**.

Table AQ-5
Total Greenhouse Gas Emissions (Annual) (Metric Tons Per Year)

TOTAL GREENHOUSE GAS EMISSIONS (ANNUAL) (METRIC TONS PER YEAR)			
	CO_2	CH_4	N_2O
Construction Emissions			
Construction Activity	819.16	--	--
Operational Emissions			
Operational Activity	2,656.22	--	--
Total Tons Per Year	**3,475.38**		

Source: TRC Solutions via URBEMIS 2007 v. 9.2.4

Note: The URBEMIS 2007 v. 9.2.4 emissions inventory model does not have the capability to quantify emissions of CH_4 and N_2O. As such, the emissions were not been included in the evaluation.

As indicated in Section 15064(b) of the State CEQA Guidelines, the determination of significance of greenhouse gases is difficult to conclude. The determination of whether a project may have a significant effect on the environment calls for a careful judgment by the City of Imperial. The City of Imperial has not yet adopted a numeric threshold of significance for emissions of greenhouse gases. Therefore, this analysis is specific to this project, and may not necessarily apply to other projects within the City of Imperial or the County of Imperial.

It is estimated that the proposed project would result in emissions of approximately 3,475.38 metric tons of CO_2 per year which represents eight ten thousandths of a percent (0.00008 %) of California 2012 total CO_2 emissions. Aircraft emit staggering amounts of CO_2, the most prevalent

manmade greenhouse gas. In fact they currently account for some 11 percent of CO_2 emissions from U.S. transportation sources and 3 percent of the United States' total CO_2 emissions. In July 2016 the EPA released a finding that greenhouse gas pollution from America's aircraft fleet does harm the climate and endanger human health and welfare. The Imperial County Airport averages 14,604 flights per year (Source: FAA Airport Master Record 2015). According to the International Civil Aviation Organization (ICAO) emissions calculator, which calculate CO_2 emissions levels per flight, it can be estimated that 6,095 metric tons of CO_2 are generated every year by the Imperial County Airport. The level of CO_2 generated by the Imperial County Airport is almost two times greater per year than the level of CO_2 anticipated by the Russell Court Subdivision.

Due to the overwhelming scope of Global Climate Change, it is not anticipated that any single development individually would have a substantial effect on Global Climate Change. No single development can be deemed individually responsible for global temperature increases and rising sea levels. Instead, Greenhouse Gas Emissions from the proposed project would combine with Greenhouse Gas Emissions emitted across the County and California, the United States and the world to cumulatively contribute to Global Climate Change.

Air Quality Conclusion

The results of the analysis indicate that during short-term construction activity emissions will not exceed the significance thresholds established by the ICAPCD. However, standard air quality mitigation procedures for construction activities, per ICAPCD Guidelines will be adhered to. Also, in the long-term operational activities emissions will not exceed the quantitative thresholds set forth by the ICAPCD.

Air Quality Impacts & Mitigation

Air Quality mitigation measures recommended are in essence best management practices. These measures are standards procedures both during construction activities and as final improvements for best operation. The developer will further be required to obtain a permit to construct from the Imperial County Air Pollution Control District prior to initiating any grading activities.

Impact AQ-1-Construction Impacts Imperial County is a non-attainment area for both particulate matter (PM10) and ozone. Construction by its very nature may produce a variety of emissions. Construction activities such as site preparation, grading, excavation and soil compaction, while temporary, may increase local emissions. Impacts to air quality from the construction of the proposed project may result in a net increase of PM10 and Ozone.

Mitigation Measure AQ-1 Any impacts from construction activities will be mitigated through the following measures as outlined in the ICAPCD Rule VIII.

Standard Mitigation Measures for Project Construction -Fugitive Dust

1. All disturbed areas, including Bulk Material Storage which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emissions by using, water, chemical stabilizers,

dust suppressants, tarps or other suitable material such as vegetative ground cover.

2. All on site and off site unpaved roads will be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.
3. All unpaved traffic areas one (1) acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emission shall be limited to no greater than 20% opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.
4. The transport of Bulk Materials shall be completely covered unless six inches of freeboard space from the top of the container is maintained with no spillage and loss of Bulk Material. In addition, the cargo compartment of all Haul Truck is to be cleaned and/or washed at delivery site after removal of Bulk Material.
5. All Track-Out or Carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.
6. Movement of Bulk Material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers or by sheltering or enclosing the operation and transfer line.
7. The construction of any new Unpaved Road is prohibited within any area with a population of 500 or more unless the road meets the definition of a Temporary Unpaved Road. Any temporary unpaved road shall be effectively stabilized and effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering.

Standard Mitigation Measures for Project Construction -Combustion Equipment & Architectural Coatings

1. Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel powered equipment.
2. Minimize idling time either by shutting equipment when it is not in use or reducing the time of idling to 5 minutes as a maximum.
3. Limit, to the extent feasible, the hours of operation of heavy duty equipment and/or the amount of equipment in use.
4. Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).
5. To provide a greater degree of reduction of PM emissions and NOx from construction combustion equipment per Air Pollution Control District

recommendations the project site will be subject to the following mitigation measures:

- Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways.
- Implement activity management (e.g. rescheduling activities to reduce short-term impacts).

6. Architectural coatings shall comply with ICAPCD Rule 424-Architectural Coatings

Impact AQ-2 Operational Impacts An estimated 1,635 daily vehicular trips are anticipated from the project when operational which may marginally contribute to reduced air quality, greenhouse gas emissions and Global Climate Change.

Mitigation Measure AQ-2 The developer shall incorporate the following measures to offset and/or reduce operational air quality impacts including greenhouse gas emissions that contribute to Global Climate Change:

1. All Project roads shall be paved.
2. Link cul-de-sacs and dead-end streets with paved pedestrian/bicycle pathways to encourage pedestrian and bicycle travel.
3. Development shall provide continuous sidewalks separated from the roadway by landscaping and on-street parking. Adequate lighting for sidewalks must be provided, along with crosswalks at intersections.
4. Development shall provide bicycle parking at apartment complex/condos and also bicycle storage at apartment complexes/condos without garages to encourage non-motorized travel to school that may result in vehicular trip reduction.
5. Developer shall incorporate low maintenance, native drought resistant trees into the parking lot areas of apartment complex/condo for 30% shade coverage within a 10 years from construction.
6. The Project layout is designed to deter driving on unpaved areas adjacent to project. Vehicles within the subdivision shall not have direct access through the cul-de-sacs to unpaved areas around the central drain to the west or the canal to the east.
7. The perimeter of Area 3 (66 Apartment/Condo Units) shall be fenced or walled to deter use of adjacent, unpaved areas.
8. All new residential development shall incorporate energy conservation features on the design of new housing construction consistent with Title 24.

3.1.2 Biological Resources

This section evaluates the biological impacts that may be associated with the proposed project and identifies mitigation measures necessary to reduce any potentially significant impacts. The information in this section is based on a Biological Resources Evaluation Technical Report prepared by Barrett's Biological Surveys on November 20, 2015 and updated on March 24, 2016, included as **Appendix C.** This assessment is based on the Biological Resources Evaluation Technical Report and on information from various sources including the California Natural Diversity Database, California Native Plant Society Database, United States Fish and Wildlife Service (USFWS), field guides and personal contacts used to ascertain potential for sensitive species on the site. The purpose of the Biological Resources Evaluation Technical Report was as follows:

- To determine the inventory of biological resources at the time of the survey;
- To determine the possibility of the existence of endangered and/or threatened, sensitive species or species of concern within the project area; and
- To map any wildlife habitats and ascertain the probability of the presence of sensitive species on the site.

General biological surveys, four focused burrowing owl surve3ys and a preliminary jurisdictional delineation were conducted in the fall/winter of 2015/2016 within the proposed site. The survey was not intended to determine the presence/absence of threatened or endangered species except for the burrowing owl, *Athene cunicularia*, but mainly to assess the potential for them to occur based on habitat suitability.

Biological Setting and Existing Conditions

The City of Imperial is found in the southern part of California, 12.54 miles north of the Mexico/US border. Elevations range from 230 feet below sea level to about 350 feet above sea level. Soils were formed from stratified alluvial materials and vary greatly in texture and thickness of layers. The project site is at an elevation of approximately -59 feet.

The project site has been farmed in the past but is not currently under agricultural cultivation. Sparse vegetation was found on the site, mostly ruderal, weedy vegetation. Surrounding land uses are sparsely developed urban uses. The land uses to the north, south, west and east are residential areas or isolated undeveloped lots within an urban built environment. The project site is further bound by Worthington Road to the north which is an arterial roadway and Nance Road to the east both of which are busy transportation corridors.

Zoological Species

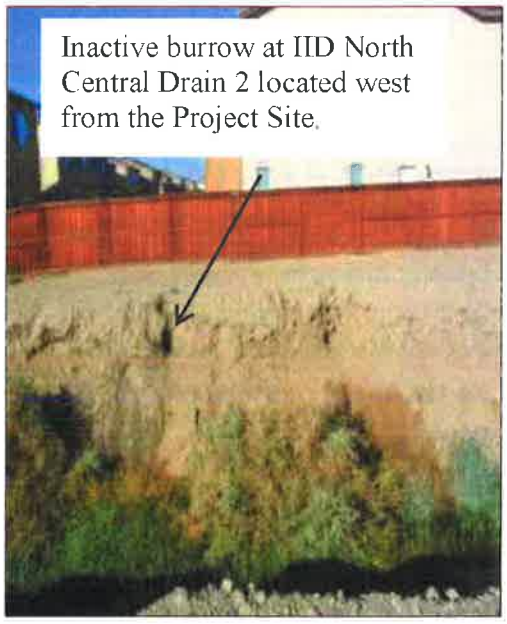
The vacant project site encompasses approximately thirty (30) acres. The biological species found on-site during the survey include only canine and feline tracks for mammals and the the following birds were also observed onsite: Loggerhead shrike (Lanius ludovicianus) and

Townsend's warbler (Setophaga townsendi). The Loggerhead Shrike is a CDFW species of special concern and is a year round resident of Imperial County. During reconnaissance no reptiles or amphibians were found on the site. Other than sparse ants, no invertebrates were observed either.

Sensitive Habitats

Sensitive habitats are those that are designated as either rare within the region by governmental agencies or known to support sensitive animal or plant species and/or they serve as "corridors" for wildlife within the region. Based upon the level of disturbance of the project site and adjacent areas, vegetative communities are considered rare or sensitive. No riparian habitat or sensitive natural community was observed on site.

The only riparian habitat that might be present off-site would be found within IID drains and canals which are right of ways maintained by the IID. The proposed project site does not contain any, nor will it result in any off-site alteration of, drains or canals, thus all species will continue to freely move throughout the general area of the project using those existing pathways. The western burrowing owl, a species of special concern, is abundant within the region, but it is mainly due to manmade features such as irrigation canals, ditches, drains, and the cultivation of agricultural crops and not to native factors. No burrowing owls or active burrows were found off-site or onsite within the construction area. Two inactive burrows were observed offsite in IID Drain located west of the project site.


Inactive burrow at IID North Central Drain 2 located west from the Project Site.

Biological Significance Criteria

Per State CEQA Guidelines, the proposed project would have an effect on biological resources, if any of the following occur:

- The project will have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- The project will have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

- The project will have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- The project will interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- The project will conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- The project will conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Biological Impact Analysis

The project area assessed was at the northwest corner of Brewer Road and Nance Road within an unincorporated area and in the County of Imperial. Based on the biological study, there are no anticipated biological Impacts to riparian habitat, wetlands, wildlife corridors, or any local ordinances or habitat conservation plans. Species of special concern were noted. The Loggerhead Shrike, was noted on-site, however the conditions of the current land are not favorable for the species as there are no foraging fields or prey for it. Although the project is not anticipated to result in any adverse impacts, avoidance measures are recommended that could trigger minimization and mitigation measures.

Biological Conclusion

The project will not alter or change any of the existing irrigation canals and/or drains within the project vicinity that may be commonly used as burrowing owl nesting sites. However, since the Burrowing Owl is a California Department of Fish & Game (CDFG) Species of Special Concern, a Federal Species of Concern listed on the Migratory Bird Treaty Act, and an IID drain is located 50 feet from the project site, a preconstruction survey is recommended as avoidance/minimization measures. Additionally, if construction is during nesting season (February-August) the survey shall further address nesting birds.

Biological Impacts & Mitigation

Although there was no evidence of burrowing owls within the project vicinity at the time of the survey, burrowing owls have occurred within close proximity to the subject site and precautionary measures shall be taken to avoid potential impacts as follows:

Impact BIO-1- An inactive burrow was found off site, and as a species special concern, mitigation in the form of avoidance and impact minimization is required.

Mitigation BIO-1 – A pre-construction survey shall be performed no less than 14 days prior to initiating ground disturbances. Report should be submitted to the City of Imperial. Construction and earthmoving activities shall comply with the following:

Avoidance Measures

1. It is recommended that construction foremen and workers and onsite employees be given worker training by a qualified biologist regarding burrowing owl that includes: description of owl; biology; regulations; wallet card with picture/guidelines; notification procedures.

Minimization Efforts

2. If occupied burrows are found on site, they should not be disturbed during the nesting season, which occurs from February 1 to August 31 unless a qualified biologist, approved by CDFG verifies through non-invasive methods that either the birds have not begun egg-laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

3. If avoidance is possible, then no disturbance of occupied burrows should occur within 50 meters (approximately 160 feet) during the non-breeding season of September 1 through January 31 or within 75 meters (approximately 250 feet) during the breeding season of February 1 through August 31. Under the direction of a qualified biologist, sheltering in place, such as utilizing hay bales or fencing to shield owls from sounds and activities may be considered during non-breeding season, if it is necessary to construct closer than 160 feet. If possible, the foraging habitat should be permanently preserved contiguous with occupied burrow site for each pair of breeding burrowing owls or single unpaired resident bird.

Mitigation Measures

4. When destruction of occupied burrows is unavoidable, in order to offset the loss of foraging and burrow habitat, foraging habitat per pair or unpaired resident bird should be permanently protected in a location and configuration acceptable to CDFG.

5. In addition, when destruction of occupied burrows is unavoidable, new burrows should be created at a ratio of 2:1. After consultation with CDFW, artificial burrows (minimum of 50 feet apart) will be installed using the guidelines found in the Imperial Irrigation District Artificial Burrow Installation Manual or other applicable manual.

6. If owls must be moved away from the disturbance area, passive relocation techniques should be used. Owls should be executed from burrows in the immediate impact zone and within a 50 meter (approximately 160 feet) buffer zone by installing one-way doors in burrow entrances. One-way doors should be

left in place 48 hours to ensure owls have left the burrow before excavation. Excavation shall be done using hand tools and refilled to prevent reoccupation. After burrow is collapsed, contractor will immediately disk down area to prevent reoccupation.

7. Documentation is required. Photographs and notes shall be taken and a report shall be sent to CDFW.

Impact BIO-2 - If construction begins between February 1 through August 31, common breeding season form most migratory birds, a direct impact of destroying nests or disrupting nesting activities might occur.

Mitigation Measures BIO-2-Within three (3) to seven (7) days prior to commencement of grading/construction activities, a qualified biologist shall perform a preconstruction survey within 500 feet from the proposed work limits and the following measures shall be implemented as applicable:

1. If active avian nest(s) are discovered within or 500 feet from the work limits, a buffer shall be delineated around the active nest(s) measuring 300 feet for passerines and 500 feet for raptors. A qualified biologist shall monitor the nest(s) weekly after commencement of grading/construction to ensure that nesting behavior is not adversely affected by such activities.
2. If the qualified biologist determines that nesting behavior is adversely affected by grading/construction activities, then a noise mitigation program shall be implemented in consultation with CDFW, to allow such activities to proceed. Once the young have fledged and left the nest(s), then grading/construction activities may proceed within 300 feet (500 feet for raptor species) of the fledged nest(s).
3. Consultation with CDFW shall be required prior to the removal of any raptor nest(s) observed during the preconstruction clearance surveys. Raptor nests are protected under Section 3503.5 of the California Fish and Game Code which makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes; or to take, possess, or destroy the nests or eggs of any such birds.

3.1.3 Cultural

This section evaluates the cultural impacts associated with the proposed project. Cultural resources represent and document activities, accomplishments, and traditions of previous civilizations and link current and former inhabitants of an area. Depending on their conditions and historic use, these resources may provide insight to living conditions in previous civilizations and may retain cultural and religious significance to modern groups. Traditional cultural resources can include archaeological resources, structures, neighborhoods, prominent topographic features, habitats, plants, animals, and minerals that Native Americans or other groups consider essential for the persistence of traditional culture. Similarly a historic resource has something important to tell us about ourselves and our past plus enough qualities to tell that story well. The information in this section is based on a Cultural Report by Tierra Environmental Services completed in February 2016 (See **Appendix D-Cultural Report).**

Cultural Setting and Existing Conditions

Archaeological resources within Imperial County can be classified into two distinct sections: prehistoric and historic. Prehistoric archeology relates to aboriginal culture and systems which existed prior to Spanish colonization in 1769. Historical archeology deals with uncovering facts for which there is no known historical documentation. The most important feature in the study of the prehistory and history of Imperial County is Lake Cahuilla, the modern iteration of which is the Salton Sea. This enormous lake periodically formed when flooding in the Colorado River broke through low-lying areas and flooded the Salton Trough, inundating up to an average elevation of about 40 feet above mean sea level. Because Lake Cahuilla was a rare source of fresh water in the desert, human populations would have been attracted to live and gather plant and animal resources near the lake. Human occupation sites mark the ancient shorelines both above the high stand mark and along the lower, retreating shorelines. The location of the current project area falls within the known boundary of Lake Cahuilla.

Prehistoric Resources-Under an ecological approach, five periods in southern California are defined: 1) Paleoindian (12,000 to 10,000 BP) and Lake Mojave (10,000 to 7,000 BP), 2) Pinto Period (7,000 to 4,000 BP), 3) Gypsum Period (4,000 to 1,500 BP), 4) Saratoga Springs Period (1,500 to 800 BP), and 5) Shoshonean Period (800 BP to Contact). In Imperial County, approximately 7,000 prehistoric archaeological sites have been recorded (Imperial County General Plan, 2008-Update). A wide variety of site types are represented including settlements, trails, rock art, geoglyphs, fish traps, and resource procurement and manufacturing locations. The distribution and availability that currently exists is a direct consequence of several environmental and historic factors which include the periodic flooding of ancient Lake Cahuilla and the existence of the New River and Alamo River. These factors encouraged prehistoric settlement and resource use in the vicinity of their shorelines and riverbanks. In the same vein, an environmental feature that discourages the likelihood of finding prehistoric cultural resources is the Algodones Sand Dunes. Similarly, the intensive use of Imperial Valley for irrigation agriculture has affected any resources that may have

existed on land since a large portion of the land has converted to farmland or under the Salton Sea.

Historic Resources–The historic period in California is generally broken into three parts: the Spanish Period (1769 to 1821), the Mexican Period (1821 to 1848), and the American Period (1848 to present). By 1927, about 95,000 acres of farmland were irrigated along the mainstream of the Lower Colorado River between Cottonwood Basin and the International Boundary, most of which was in the Imperial Valley and included the community of Niland. Boulder Dam (now Hoover Dam) was completed in 1935, drastically and suddenly changing water flow of the river, and eliminating the floods that characterized the region and allowing for consistent agriculture in the Imperial Valley and Salton Sea region. The City of Imperial incorporated in 1904 largely as a farming community.

Identified historic period built-environment and archaeological resources represent a range of activities including, but not limited to, mining, transportation, and ranching/homesteading and are represented throughout the County. The number of previously identified historic period resources is smaller than prehistoric resources, making determination of areas of known or established sensitivity difficult. It is possible, however, to make informed deductions about the types of resources likely to be encountered based on the previously identified sites in combination with the documented history of the area. There are four cultural resources listed in the SCIC databases for Imperial County (see **Table C-1**). The resources included two historic water conveyance systems and two historic addresses.

Table C-1
Cultural Resources Within Project Vicinity

Cultural Resources within 1-Mile of the Project Area			
Resource No.	**Period**	**Description**	**Year**
P-13-008426	Historic	Engineering Structure: Water Tank	2001
P-13-013746	Historic	Canal/Aqueduct	2010
n/a	Historic	Address: 393 S. D Street - 1920's	n/a
n/a	Historic	Address: 197 H Street - 1925	n/a

In addition to the results of the records search, three structures were visible in a historic aerial dating back to 1953 and on a historic topographic map dated 1958 (HistoricAerials.com 2015). The three structures were located along the eastern boundary of the project area, one at the northeast corner in Area 3 (66 Apartment Units) and two in Area 1 - 130 R-1 Units (one at the southeast corner and one at the northeast corner). These resources are not included in the SCIC's records search data due to the area having not been surveyed since 1982 at which point these resources were likely not yet of historic age.

Flora and Fauna Resources–As the climate of the region is largely determined by topographic features, climate, in turn, largely dictates the character of the biotic environment exploited by native populations. Bean and Saubel (1972) describe three primary life zones that were exploited by the native inhabitants of the Salton Sea Basin: Lower Sonoran, Upper Sonoran, and Transitional. However, it should be noted that historic aerials show the project area as having been cultivated back to the 1950s.

Cultural Significance Criteria

Per State CEQA Guidelines, the proposed project would have an effect on Geology and Soils if any of the following occur:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- Disturb any human remains, including those interred outside of formal cemeteries.

Cultural Impact Analysis

The fieldwork was conducted on October 8, 2015 and February 12, 2016 by Tierra Environmental Services. Surface indicators during the survey, as well as noted in the archival data, showed the entire project area had been subjected to extensive disturbance over the last 60 years, most commonly through agricultural cultivation.

Area 1–(130 R–1 Single Family Dwelling Units) of project area was observed to have been graded in recent years as evidenced by large push piles of dead vegetation. There was one resource identified as a one-story, single-family residence which was visible on historic aerials dating back to 1953. The structure is a Bungalow /Craftsman style with a gabled roof. The house is currently inhabited and partially fenced off limiting access during the survey to a view from public land. It is apparent the structure had been heavily altered over the years with new windows, a stucco façade, and new roofing. Moreover, additional rooms have been added to the structure further altering its original character. Due to the extensive modifications made to the structure, the house lacks original integrity. No evidence of prehistoric resources were observed during the survey.

Area 2–(1 R–1 Single Family Dwelling Unit) had been recently graded at the time of survey. An earthen house pad had been formed and construction machinery was present onsite. No evidence of prehistoric resources or cultural resources were observed during the survey.

Area 3–(66 RA–Residential Apartment Dwelling Units) contained the remnants of a single-family residence, in the northeast corner. The structure is within a chain-link fenced area that also contains associated features including a well system, septic system, retaining wall, and

livestock shelter. In addition to these features, there is a push pile of concrete and debris on the property. The structure appears on the 1953 aerial. The dwelling is a one-story, six-room house with attached garage. It appears several adaptations were made to the structure but it can best be described as the Craftsman/Bungalow style. The house has been gutted and stripped down to studs illustrating its post and beam construction. The structure retains no integrity and is in a state dilapidation. Two cisterns, a livestock shelter and a septic system were also noted on the site. No evidence of prehistoric resources were observed during the survey.

In addition to the aforementioned field work and survey work, The Native American Heritage Commission was consulted on August 15, 2016 that resulted in a negative results for sacred lands search. Subsequently, fourteen tribes were consulted pursuant to Public Resource Code Section 21080.3.1 and 21080.3.2. Out of the fourteen tribes, only two responded. The Cocopah Indian Tribe responded with no comments, while the Viejas Band of Kumeyaay Indians ("Viejas") responded by requesting that a Kumeyaaay Cultural Monitor be afforded the opportunity to be present during ground disturbance activities due to the site's cultural ties to Viejas.

Cultural Conclusion

No prehistoric resources were observed within the proposed project area. Although two historic period single-family dwellings were observed and recorded, due to the complete lack of integrity of the identified dwelling units they have both been eliminated from meeting Criterion 3 of the CEQA requirements. According to CEQA guidelines, a non-significant cultural resource need not be given any further consideration (PRC 21083.2 [h]). Although there were no sacred lands identified by the Native American Heritage Commission, the project is within the Viejas Band of Kumeyaay Indians area of interest and further consultation and coordination of monitoring will be required. Additionally, best management practices will need to be implemented in the unlikely and unanticipated event that buried prehistoric archeological resources are identified during construction.

Cultural Impacts & Mitigation Measures

Impact C-1 The proposed project site is has the potential of being considered to be cultural significant to the Viejas Band of Kumeyaay Indians.

Mitigation C-1 In order to preserve and protect any potentially significant cultural resources, the following Mitigation Measures shall be implemented:

1. Mr. Earnest Pingleton of The Viejas Band of Kumeyaay Indians will be contacted at least thirty days prior to construction and be afforded the opportunity to assign a Kumeyaay Cultural Monitor on-site during ground disturbance activities.
2. In the unlikely event unanticipated, buried prehistoric archaeological resources (lithic material, faunal, pottery, etc.) or historical archaeological resources (ceramics,

building materials, glassware, etc.) be unearthed during construction or any ground disturbing activities within the project areas, additional resource treatments would become necessary. Once a potential resource has been identified, all work within 100 feet must be halted until the find can be assessed by a qualified archaeologist.

3. If human remains are encountered during the proposed work, no further excavation or disturbance may occur in the vicinity of the find or in any area which may also harbor similar remains until the County coroner has been contacted. If the coroner identifies the remains as Native American, the descendants will be notified by the Native American Heritage Commission.

3.1.4 Geology and Soils

This section evaluates the geological and soils impacts associated with the proposed project and identifies mitigation measures necessary to reduce potentially significant impacts. The information in this section is based on a Preliminary Geological and Geotechnical Evaluation prepared by Landmark Consultants, Inc in September 2016. The geotechnical evaluation is included as **Appendix E-Geotechnical Report**. The purpose of the Preliminary Geological and Geotechnical Evaluation is as follows:

- Identify and site location in relation to mapped earthquake faults and seismic zones;
- Review of published geologic literature and maps;
- Determine the intensity of ground shaking at the site determined by probabilistic methods;
- Potential for liquefaction, ground failure, and landslides at the site;
- Potential for expansive soil hazards at the site including methods for mitigation; and
- Potential for flooding at the site from man-made facilities (dams, canals, etc.) and from natural storms.

Geological Setting & Existing Conditions

The Imperial Valley is located between the Salton Sea, which lies to its north, the Anza-Borrego Desert State Park, which lies to the west, the Chocolate Mountains which lie to the northeast and the U.S./Mexican Border which constitutes its most southern boundary. The project site is located in the Imperial Valley portion of the Salton Trough, a topographic and geologic depression resulting from large scale regional faulting. Land in and around the City of Imperial is primarily flat, with several gently rising hills. The topography in the area has a gradual downward slope trending southwest with an average slope across the town between 0-2%. According to the US Geological Survey data, the elevation in the City of Imperial is generally 60 feet below sea level. The Russell Court Subdivision project area is at an approximate elevation of -60 feet.

Geological resources typically consist of surface and subsurface materials and their inherent properties. Imperial County, in general, is underlain by three natural geomorphic provinces: the Peninsular Ranges, the Colorado Desert, and the Mojave Desert. Each of these provinces is a naturally defined geologic region that displays a distinct landscape or landform with defining features based on geology, faults, topographic relief, and climate. Tectonic activity that formed the Trough continues at a high rate and therefore, the project site is considered likely to be subjected to moderate to strong ground motion from faults in the region. The entire Imperial Valley is seismically active and considered to be subjected to moderate and strong ground motion from earthquakes in the region. Although there is no known earthquake fault as delineated in the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the

project site, the project site has a potential for strong ground shaking because of the nearby Brawley, Superstition Hills, and Imperial Faults (Refer to **Exhibit G-1-Regional Faults**).

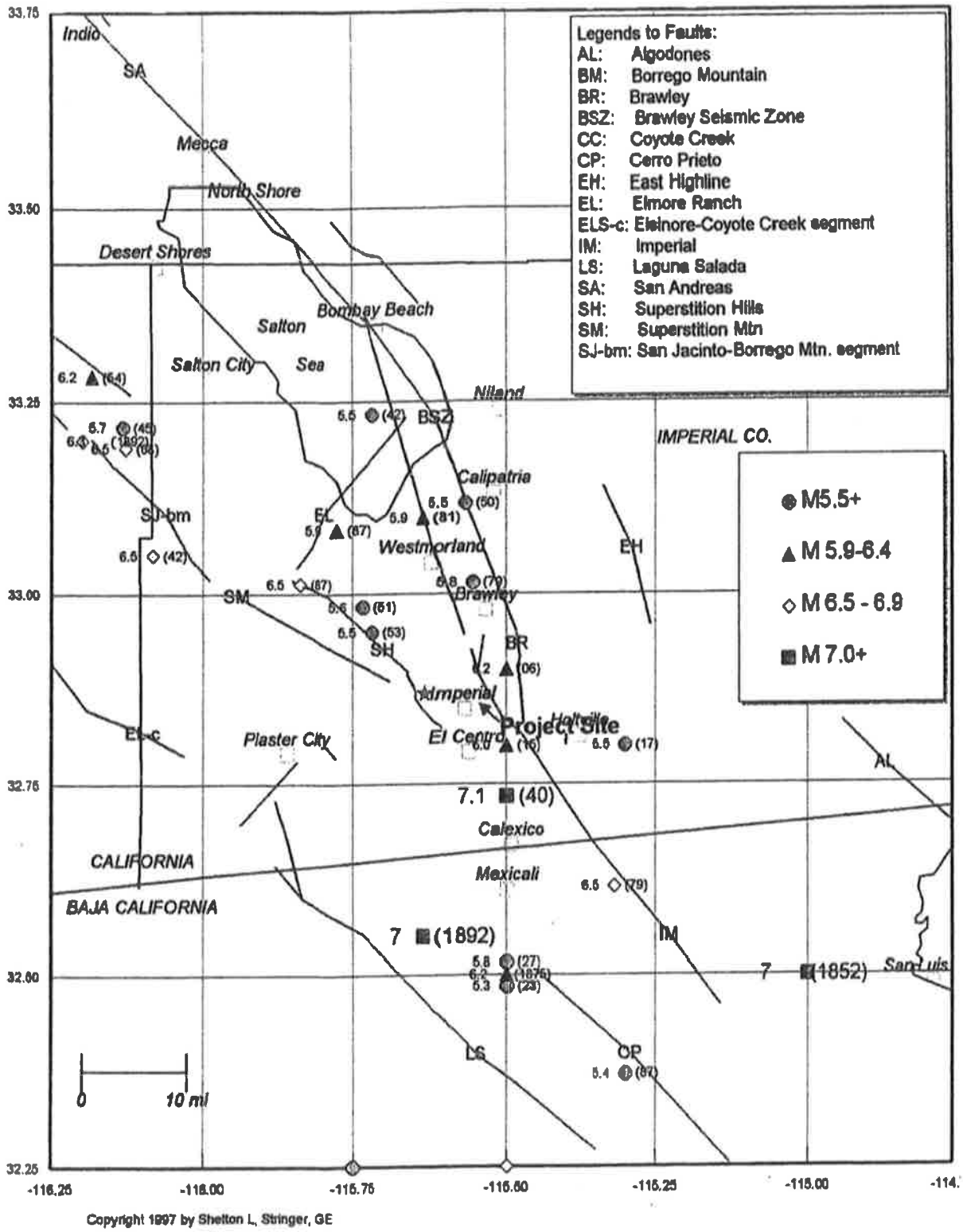
Groundwater - In the Imperial Valley groundwater is typically countered at about 8 to 10 feet below the ground surface. There is uncertainty in the accuracy of short-term water level measurements, especially in fine-grained soil. Additionally, groundwater levels may fluctuate depending on precipitation, irrigation of adjacent properties, drainage and site grading. According to the Geotechnical Report prepared by Landmark groundwater can be found at depths of eight feet at the project site. The groundwater level noted at the site should not be interpreted to represent an accurate or permanent condition.

Landslides - Landslides at the project site are unlikely because of the regional planar topography within the area. No ancient landslides are depicted on geological maps of the region and no indications of landslides were observed during the site investigation. Small scale slope failures may occur on the embankment of the North Central Drain No. 2 generally constructed with 1.25 horizontal to 1 vertical side slopes. These, are not expected to impact the project site as the Imperial Irrigation District maintains right-of-ways along the drains. The land in the City of Imperial and project site is relatively flat and is not susceptible to landslides or mudslides. However, due to the shallowness of the ground water table in the Imperial Valley and the proximity to faults, there is a potential for liquefaction. The recommendations of the Geotechnical Study will need to be strictly adhered to reduce any potential impacts to a level below significance.

Tsunamis, Sieches and Flooding - The project site is does not lie near any large bodies of water. Thus, the hazard of tsunamis, sieches or other seismically induced flooding is considered unlikely.

Expansive Soil - Generally, the soils within the Imperial Valley consist of silty clays and clays which are moderate to highly expansive. The clay is typically expansive when wetted and can shrink with the loss of moisture. The development of building foundations, concrete flatwork and asphaltic concrete pavements will need to include mitigation measures to mitigate for potential swelling forces and reduction in soil strength which can occur from the saturation of the soil. Reasons for soil saturation include landscape irrigation, broken utility lines or capillary rise in moisture upon sealing the ground surface to evaporation. Moisture losses occur with lack of landscape watering, proximity of structures to downslopes and root system moisture extraction from deep rooted shrubs and trees placed near the foundations.

Exhibit G1 – Regional Faults and Seismicity Map



Seismic Hazard – Because the project site is located within the seismically active area of the Imperial Valley, it is likely to be subjected to moderate to strong ground motion from earthquakes in the region. The primary seismic hazard is the potential for strong groundshaking during earthquakes along the Imperial, Brawley and Superstition Hill Faults. (Refer to Exhibit G1). Deterministic horizontal peak ground accelerations (PGA) from maximum probable earthquakes on regional faults have been estimated and are included in **Table GS-1 – Fault Parameters and Deterministic Estimates of Peak Ground Acceleration (PGA)**. The PGA for the project having a 10% probability of occurrence in 50 years is 0.86g. The UBC seismic coefficients are based on earthquake ground motion that has a 10% probability of occurrence in 50 years. The closest fault is Superstition Hills at 1.6 miles from the site. The project site lies within 38.5 miles of a Type A fault overlying S_D (stiff) soil (Imperial Fault).

TABLE GS-1 Fault Parameters and Deterministic Estimates of Peak Ground Acceleration

Fault Name or Seismic Zone	Distance (mi) & Direction From Site	Fault Type		Fault Length (km)	Maximun Magnitude Mmax (Mw)	Avg Slip Rate (mm/yr)	Avg Return Period (Yrs)	Date of Last Rupture	Largest Historic Event >5.5M (years)		Est. Site PGA
Reference Notes: (1)		2	3	(3)	(2)	(4)	(3)	(3)	(5)		(6)
Imperial Fault Zone											
-Imperial	4.0 E	A	B	62	7.0	20	79	1979	7.0	1940	0.51
-Brawley	6.6 E	B	B	14	7.0	20	-	1979	5.8	1970	0.42
-Brawley Seismic Zone	4.0 NW	B	B	42	6.4	25	24		5.9	1981	0.19
East Highline Canal	18 NE	C	C	22	6.3	1	774				0.10
Cerro Prieto	24.5 SE	A	B	116	7.2	34	50	1980	7.1	1934	0.15
San Jacinto Fault System											
-Superstition Hills	1.6 W	B	A	22	6.6	4	250	1987	6.5	1987	0.34
-Superstition Mtn.	6.5 NW	B	A	23	6.6	5	500	1440+/-			0.20
-Elmore Ranch	19.9 NW	B	A	29	6.6	1	225	1987	5.9	1987	0.11
-Borrego Mtn.	20.2 NW	B	A	29	6.6	4	175		6.5	1942	0.09
-Anza Segment	18.7 NW	A	A	90	7.2	12	250	1918	6.8	1918	0.09
-Coyote Creek	8.0 NW	B	A	40	6.8	4	175	1968	6.5	1968	0.07
Elsinore Fault System											
-Laguna Salada	18.7 SW	B	B	67	7.0	3.5	336				0.14
-Coyote Segment	26.0 NW	B	A	38	6.8	4	625		7.0	1891	0.10
-Earthquake Valley	54 NW	B	A	20	6.5	2	351				0.05
San Andreas Fault System	36 E	A	A	95	7.4	25	220-	1690+/-			0.11
-Coachella Valley	66 N	A	A	458	7.9	-	-	1857	6.5	1948	0.14
-Algodones											

Note:

1. Jennings (1994) and CDMG (1996)
2. CDMG (1996), where type A faults– slip rate >5 mm/yr end well constrained paleoseismic data
   Type B faults– all others faults.
3. WGCEP (1995)
4. CDMG (1996) based on Wells & Coppersmith (1994
5. Elsworth Catalog in USGS PP 1515 (1990) and USBR (1976), Mw= moment magnitude.
6. The determination estimates of the Site PGA are based on Attenustion relationship of:
   Boore, Joyner, Fumal (1997)

Surface Rupture – The project site is not within a State of California Alquist-Priolo Earthquake Fault Zone. As such, surface fault rupture is considered to be unlikely at the project site.

However, because of the high tectonic activity and deep alluvium of the region, geologists cannot preclude the potential for surface rupture on undiscovered or new faults that may underlie the site. The project site is 3.97 miles (6.4 km) away from the Imperial Fault. This Fault is deemed one of the most active faults in California, having experienced earthquakes of magnitude 6.7 twice in the past 60 years, one in 1940 and the other in 1979.

Liquefaction – In the Imperial Valley liquefaction is a potential design consideration because of possible saturated sandy substrata. It occurs when granular soil below the water table is subjected to vibratory motions, such as those produced by earthquakes. When the ground shakes, there is an increase in power water pressure. If the increase in pore water pressure reduces the vertical effective stress, the strength of the soil decreases the soil behaves as a liquid. Liquefaction can produce ground rupture, lateral spread, excessive settlement or failure of shallow bearing foundations. In the 2016 Geotechnical Report it was reported that the Project Area may have one or more of the conditions generally required for liquefaction. The conditions for liquefaction are as follows:

1. The soil must be saturated (relatively shallow groundwater);
2. The soil must be loosely packed (low to medium relative density);
3. The soil must be relatively cohesionless (not clayey); and
4. Ground-shaking of sufficient intensity must occur to function as a trigger mechanism.

Geological Significance Criteria

Per State CEQA Guidelines, the proposed project would have an effect on Geology and Soils if any of the following occur:

- The project will expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
    - Strong seismic ground shaking.
    - Seismic-related ground failure, including liquefaction.
    - Landslides.
- The project will result in substantial soil erosion or the loss of topsoil.
- The project will be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse.
- The project will be located on expansive soil, as defined of the latest Uniform Building Code, creating substantial risk to life or property.

- The project will have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

Geological Impact Analysis

The residential structures are planned to consist of slabs-on-grade foundations and wood-frame construction. Footing loads at exterior baring was were evaluated at 0.5 to 5 kips per lineal foot and column loads were estimated at 5 to 30 kips. The geotechnical report investigated the subsurface soil at selected locations.

Soils-Subsurface Sols consist of interbedded sands, silts and clays. Silty clay was encountered from the surface to a depth of approximately 20 feet. Stiff silty clay and clay were encountered from 38 to 50 feet. The native surface clays likely exhibit low swell potential and expansive when wetted and can shrink with moisture loss. Development of building foundations, concrete flatwork and asphaltic concrete pavement should include provisions for mitigating potential swelling forces and reduction in soil strength which can occur from saturation of the soil (landscape irrigation, broken utility lines, or capillary rise in moisture).

Groundwater-Although groundwater was not noted in the electronic cone penetrometer locations, groundwater is typically encountered at approximately eight feet below ground surface. Groundwater levels may fluctuate with precipitation, irrigation of adjacent properties, site landscape watering, drainage, and site grading.

Seismic Activity-The project site is considered likely to be subject to moderate to strong ground shaking from earthquakes in the region including the Imperial, Brawley and Superstition Hills faults. The site soils were classified as stiff soils that have a risk Category II determining a Seismic Design Category E.

Liquefaction-With strong ground shaking, an increase in pore water pressure develops as the soil tends to reduce in volume which if sufficient to reduce vertical effect stress, the soil strength may decrease and behave as a liquid (quicksand). Liquefaction was therefore round to be a potential design consideration because of the underlying saturated sandy substrata. The following four conditions required for liquefaction were found to exist at the site:

- shallow ground water
- loosely packed soil (low to medium density)
- relatively cehesionless soil (not clayed)
- ground-shaking potential

Geological Conclusion

The Geotechnical Report utilized to prepare this section was prepared in in September 2016 by Landmark Consultants and determined that foundation design requires mitigation for expansive soils conditions and earthquake resistant construction. Additionally, the silty clay soils require

special design considerations of foundations and pavements due to the non-uniform moisture conditions. All recommendation in the Geotechnical Report shall be strictly adhered to.

Geological Impacts & Mitigation

The Geotechnical Report has identified areas of concern under seismicity, liquefaction potential and soil conditions that may adversely impact foundations. These conditions require mitigation as follows:

Impact GS-1 The site is located in a seismically active are nearby seismic faults including the Imperial, Brawley, Superstition Hills faults and this is subject to strong round shaking.

Mitigation GS-1 Design of the Russell Court Subdivision shall comply with the latest edition of the California Building Code for Site Class D using the seismic coefficients given in Table 2 of the Geotechnical Report prepared by Landmark Consultants.

Impact GS-2 Groundwater depths in the proposed project area are anticipated to be fairly shallow. Additionally, the site may be composed of silty and sandy soils. These conditions could result in a risk of liquefaction during seismic events.

Mitigation Measure GS-2 The design of the Russell Court Subdivision shall consider the foundation of the structures as either of the following:

1) Foundations that use grade-beam footings to tie floor slabs and isolated columns to continuous footings (conventional or post-tensioned)
2) Structural flat-plate mats, either conventionally reinforced or tied with post tensioned tendons

Impact GS-3 The native soil has severe to very severe levels of chloride ion concentration (1,030 to >18,000 ppm). Chloride ions can cause corrosion of reinforcing steel, anchor bolts and other buried metallic conduits. Resistivity determinations on the soil indicated very severe potential for metal loss because of electrochemical corrosion processes.

Mitigation GS-3 Mitigation of the corrosion of steel can be achieved by using steel pipes coated with epoxy corrosion inhibitors, asphaltic and epoxy coatings, cathodic protection or by encapsulating the portion of the pipe lying above groundwater with a minimum of 5 inches of densely consolidated concrete. No metallic water pipes or conduits should be placed below foundations.

3.1.5 Hazards and Hazardous Materials

The California Environmental Quality Act requires an assessment of potential impacts from hazards and hazardous material to the public or the environment that may result from the project. Impacts from hazardous materials are determined in terms of the potential to release existing hazardous materials that may exist on, or in the vicinity of the project site and the potential for their release as a result of their use in development of the Russell Court Subdivision. This chapter provides information on safety hazards within the City of Imperial and project area, including

environmental hazards associated with flood, fire, emergency preparedness, and hazardous waste disposal.

Hazards Setting & Existing Conditions

A framework of Federal, State and local environmental laws, ordinances, regulations and standards, exists to reduce risks of accidents and reduce routine hazards, ranging from the federal Superfund and Clean Air Acts to State requirements for Risk Management Plans submitted by stationary handlers, to the local Uniform Fire and Building codes.

The Russell Court Subdivision is a residential development proposed within predominantly existing, low density residential land uses. There are, however, a number of establishments within 1/4 mile of the project vicinity that use, store, handle or dispose of hazardous materials including the Imperial Water Treatment Plant which is located less than 1,000 feet away from the proposed project site. There is also the risk of exposure of hazardous material which is common near roadways that are frequently used to transport such materials in addition to other natural hazards discussed in the preceding sections. The following is a summary of existing potential hazards:

Flood Hazards–Floodplain management generally refers to the 100-year floodplain, and is concerned with both potential structural damages within the floodplain as well as changes to the configuration of the floodplain brought about by flood protection measures or construction activities. The 100-year floodplain delineates the inundation area from a flood having a one percent chance of occurring in any given year. There is a 100-year flood hazard area along the New River Corridor, with wider pockets of flooding areas along its path. The project site, however, is not affected by the New River corridor as it is 2.75 miles away from the river's 100-year floodplain. However, it is important to note that due to deficient and/or absent stormwater collection systems flooding conditions are known to occur within certain areas of the community.

Hazardous Material & Waste–Solid, liquid, and hazardous materials and waste from area residents and businesses contribute to environmental and human health hazards that have become an increasing public concern. Toxicity and contamination of soils, water, air, and organisms present hazards of varying severity that can be controlled and minimized by proper waste management and disposal. A listing of Federal and State databases was reviewed including Envirostor and Geotracker and one facility, which identified the nearest hazardous disposal site 3.96 miles away. Caspian Inc. is located off of Aten Road, at the intersection of W. Aten Road, and Patrol Road and currently undergoing closure.

Although a hazardous material incident can occur almost anywhere, certain areas are at higher risk. Jurisdictions with agriculture that use, store, handle or dispose of hazardous materials or those near roadways that are frequently used to transport such materials have an increased potential for major accident. Some possible sources of contamination might be the older underground storage tanks used to store hazardous materials including petroleum

products. State laws relating to underground storage tanks include permitting, monitoring, closure, and cleanup requirements.

Asbestos- Asbestos are another common environmental hazard in the area. Asbestos, a naturally-occurring fibrous material, was used as a fireproofing and insulating agent in building construction before such uses were banned by the Environmental Protection Agency (EPA) in the 1970's. Asbestos can cause lung diseases in persons exposed to its airborne fibers. Because it was widely used prior to the discovery of its health effects, asbestos may be found in a variety of building materials and components including walls, ceilings, floors (tile), fireproofing, and pipe insulation in a number of existing buildings and structures in the Imperial Valley and within the Planning Area. All new development requires Phase I Environmental Assessments to determine the presence of asbestos materials on site.

Pesticides- The majority of the project site was historically used for agricultural purposes. Agricultural activities have traditionally used pesticides that contain hazardous chemical toxins. Pesticides contain chemicals formulated specifically to be toxic to certain living things. Due to the site's historical operation for agricultural production, low concentrations of pesticide residue typical to agricultural crop applications are commonly present in surface soils. These toxins can remain in the soil and can be released during grading activities. As previously noted a Phase I Environmental Assessment would determine the proper protocol for soil replacement if necessary.

Airport Hazards-The Imperial County Airport is located within 2 miles (at approximately 2,000 feet) from the project site. The airport's central location presents problems in terms of land use compatibility. The urban growth in the surrounding areas is enveloping the airport. The project is also located within the Airport Land Use Compatibility Plans' Zone C which is a common traffic pattern with some risk, albeit limited. Within this zone aircraft is at or below 1,000 feet with frequent noise intrusion. The ICALU compatibility allows for maximum densities of 6 residential units per acres with a minimum of 15% open land.

Emergency Preparedness-The City of Imperial adopted an Emergency Operations Plan in November 2015. This plan reflects local, regional and national advances in emergency management capabilities and changes in the Emergency Services Act (ESA). The basic purpose of the plan is designed to establish planning and to set forth the actions to be taken whenever the City of Imperial is faced with a disaster beyond the scope of normal day-to-day emergencies. Its goal is to prevent such disasters if possible and if not, to reduce the vulnerability of the City to such disasters; and to be able to respond quickly because of forethought and preparedness to restore life to normal in the City if and when disaster occurs.

The EOP addresses mitigation, preparedness, response, and recovery activities. There are three basic parts to the Imperial EOP. Part I is the basic plan, describing the hazards that could be faced in the City of Imperial, the emergency management organizations, the Standardized Emergency Management System (SEMS), the National Incident Management System (NIMS),

emergency declarations, roles and responsibilities, and administrative practices. Part II consists of an overview of the organization for response and recovery operations, including City agencies and other organizations with lead and support responsibilities. Part III is a listing of plans and documents that are identified as references to the Imperial EOP. Included are laws, regulations, roles, orders, plans, training material, resource manuals, and agreements that support this plan. They provide additional detailed information for the conduct of emergency operations and performance of emergency duties.

Hazards Significance Criteria

Per State CEQA Guidelines, the proposed project would have an effect on the environment, if any of the following occur:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonable, foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a quarter mile of an existing or proposed school;
- Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment;
- Result in a safety hazard for people residing or working in the vicinity of a private airstrip or within the Airport's Land Use Compatibility Zone;
- Impair the implementation of, or physically interfere with an adopted emergency evacuation plan; or
- Expose people or structures to a significant risk or loss, injury or death involving wildland fires.

Hazards Impact Analysis

Impacts from hazardous materials and the preceding determinations were made in terms of the potential to release existing hazardous materials during construction in addition to those that may exist on, or in the vicinity of the project site and the potential for their release as a result of their use in project construction and/or operation.

Hazardous Material Sites and Transport–The water treatment plant located less than 1,000 miles from the site also uses a number of chemicals consisting of sodium hypochlorite, polyaluminum chloride, aluminum sulfate, and on occasion copper sulfate. Numerous local, state, and federal laws regulate the storage, handling, disposal, and transportation of

hazardous materials and waste that would be applicable at the WWTP. The project's adjacent roadway are not a common transportation route for access to the water treatment plant.

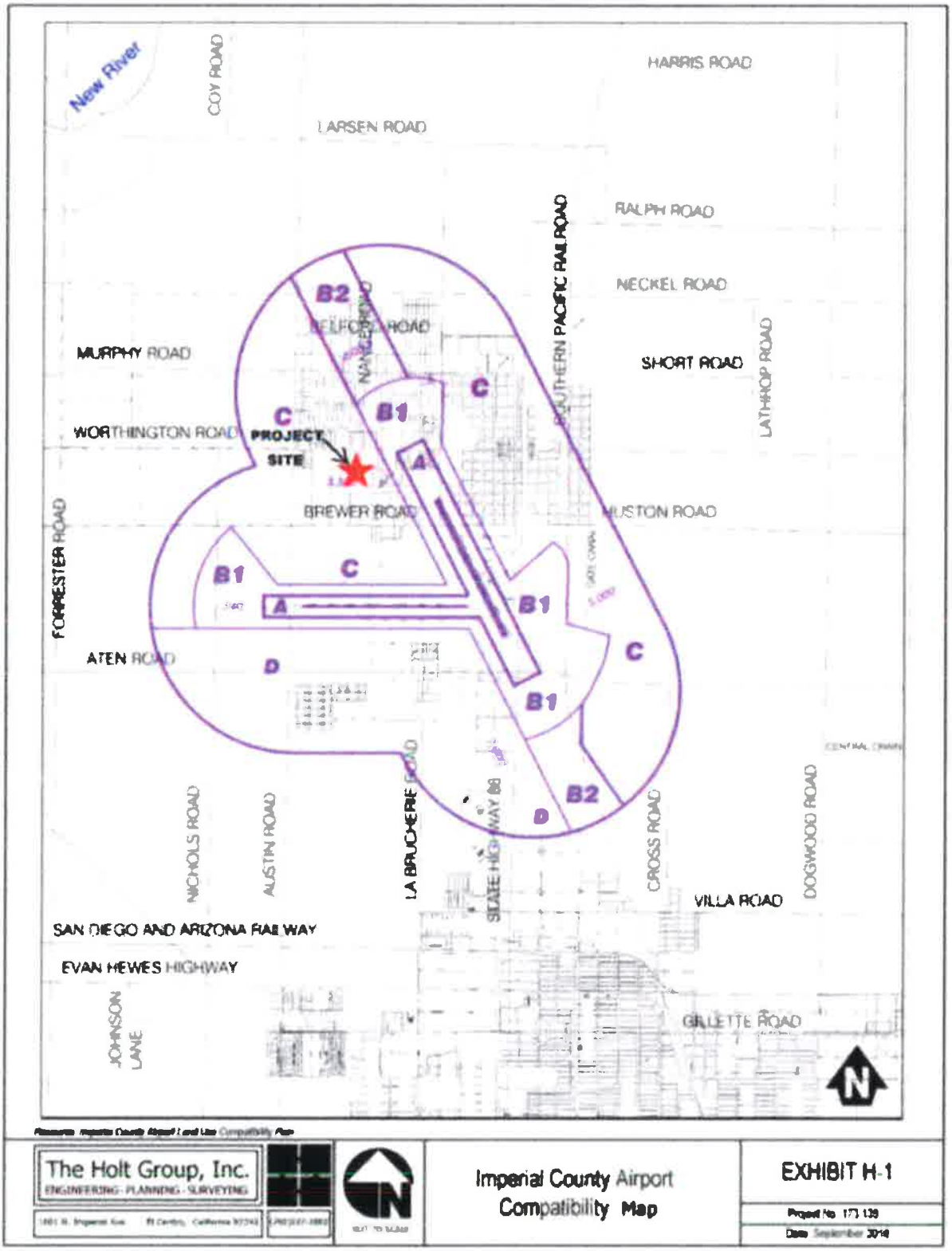
According to an Envirostor search there are no hazardous material storage facilities located near the project site. The nearest site is 3.96 miles away and in the process of closure. However, during construction activities hazardous materials such as fuel, grease, waste oil and paint may be used and transported. Best Management practices will be used during construction activities.

Air Navigation Hazards-The other predominant land uses with a potential for hazards to or from the project area is the Imperial County Airport located only 2,000 feet to the southeast. The subject project site is located within the Airport Overlay Zone C as depicted in **Exhibit H-1- Imperial County Airport Land Use Compatibility Map.** The development proposes structures up to two stories in height for some single family residential and for the apartment units anticipated. The maximum construction height is anticipated at 35 feet but may be permissible up to 52 feet in height, per the adopted development standards. The development will need to obtain a determination from the FAA of No Hazard to air navigation during the design of any two story buildings to ensure they are not a hazard to aircraft.

Hazards Conclusion

The potential for hazards to, and from, the proposed Russel Court Subdivision, given the general implementation of Best Management Practices during construction activities and given the regulatory tools available to restrict heights to any structures that might be a hazard to air navigation, are minimal. In order to maintain awareness levels of these minimal risks, disclosures to potential residents shall be required as well as verification that the proposed heights will not be an adverse risk to aircraft.

Exhibit H-1 Imperial County Airport Land Use Compatibility Map



Hazards Impact & Mitigation Measures

The review of potential hazards to or resulting from the proposed project determined that residents of the Russell Court Subdivision could be exposed to limited risk associated with operations at the Imperial County Airport. The following Mitigation Measures are recommended for the potential impacts:

Impact HZ-1 - The project is located within the Imperial County Airport Land Use Compatibility Plans' Zone C which is a common traffic pattern with limited risk to residential land uses.

Mitigation HZ-1- An overflight easement for residential uses shall be recorded with all property deeds and fully disclosed at the time of sale regarding this limited risk from aircraft.

Impact HZ-2 - The two-story structures at the maximum height of thirty five feet are within proximity to a navigation facility in a manner that may impact the assurance of navigation signal reception as concluded through the Federal Aviation Administration Obstruction Evaluation/Airport Airspace Analysis Online Criteria Tool.

Mitigation HZ-2- The developer shall file with the Federal Aviation Administration any proposed two story residential and/or apartment unit improvements at least 45 days prior to construction for a No Hazard to Air Navigation Finding. The results of the formal consultation shall be submitted to the City of Imperial Building Official along with a building permit application.

3.1.6 Hydrology/Water Quality

The purpose of this section is to evaluate and describe the impacts of the proposed project on surface and groundwater resources, including water quality. Additionally, this section analyzes the project's potential to generate runoff that could potentially affect flooding of drainage characteristics, both onsite and downstream or to be affected by flooding, storm events or stormwater infrastructure dam failure inundation.

Hydrology Setting and Existing Conditions

The proposed project is located within the boundaries of the Regional Water Quality Control Board's Colorado River Basin Plan. The Colorado River Basin Region encompasses approximately 13 million acres in the southeastern portion of California. It includes all of Imperial County and portions of San Bernardino, Riverside and San Diego counties. Geographically, the region represents only a small portion of the total Colorado River drainage area which includes portions of Arizona, Nevada, Utah, Wyoming, Colorado, New Mexico and the Republic of Mexico. A significant geographical feature of the region is the Salton Trough, which contains the Salton and the Imperial and Coachella Valleys. The two Valleys are separated by the Salton Sea, which covers the lowest area of depression. The trough is a structural extension of the Gulf of California. In prehistoric time it contained the ancient Lake Cahuilla. The Colorado River is the most important waterway within the region. The River supplies water for use within the region. Regional drainage to the river is from a strip approximately 200 miles long, with a watershed which ranges in California from 7 to 40 miles in width. This watershed strip is referred to as the East Colorado River Basin. Water is diverted for irrigation to the Palo Verde Valley, Bard Valley, Imperial Valley, and Coachella Valleys.

Regional drainage waters resulting from Colorado River diversions and use and which do not return to the Colorado River drain into the Salton Sea. This region is referred to as the Colorado River Basin West. The Imperial and Coachella Valleys contain numerous drains that transport irrigation return flows and stormwater as well as canals for the importation and distribution of Colorado River water. The drainage system in Imperial County is owned and operated by the Imperial Irrigation District.

Surface Water- In Imperial County there are three general categories that describe surface water quality. These are freshwater, brackish water, and saline water. The freshwater includes the All-American Canal and other canals and laterals which deliver irrigation water to the agricultural fields within the County. The brackish waters include the Alamo River, New River and the agricultural drains that flow into these rivers or directly into the Salton Sea. The Salton Sea represents the saline water category. There are three major canals in Imperial County: Highline Canal, Central Main Canal, and West Side Main Canal. There are numerous other smaller canals and laterals. The Newside Canal is a smaller channel located immediately east and adjacent to the project site along Nance Road (See **Exhibit H-1 Hydrology Map**).

Exhibit H-1 Hydrology Map

Planes/Wetlands- The project site is not within a flood hazard area. The nearest flood zone is along the New River located 2.75 miles west. However, immediately east of the project site is a man-made, concrete lined drainage channel and immediately west is an earth lined channel that extends .63 miles north west of the project site and 1 mile south of the project site. Due to the presence of a defined bed and bank and hydrophytic soils and weedy vegetation, the conditions within this drainage channel deem it a "disturbed wetlands." The project will not result in any alteration to the existing drainage system.

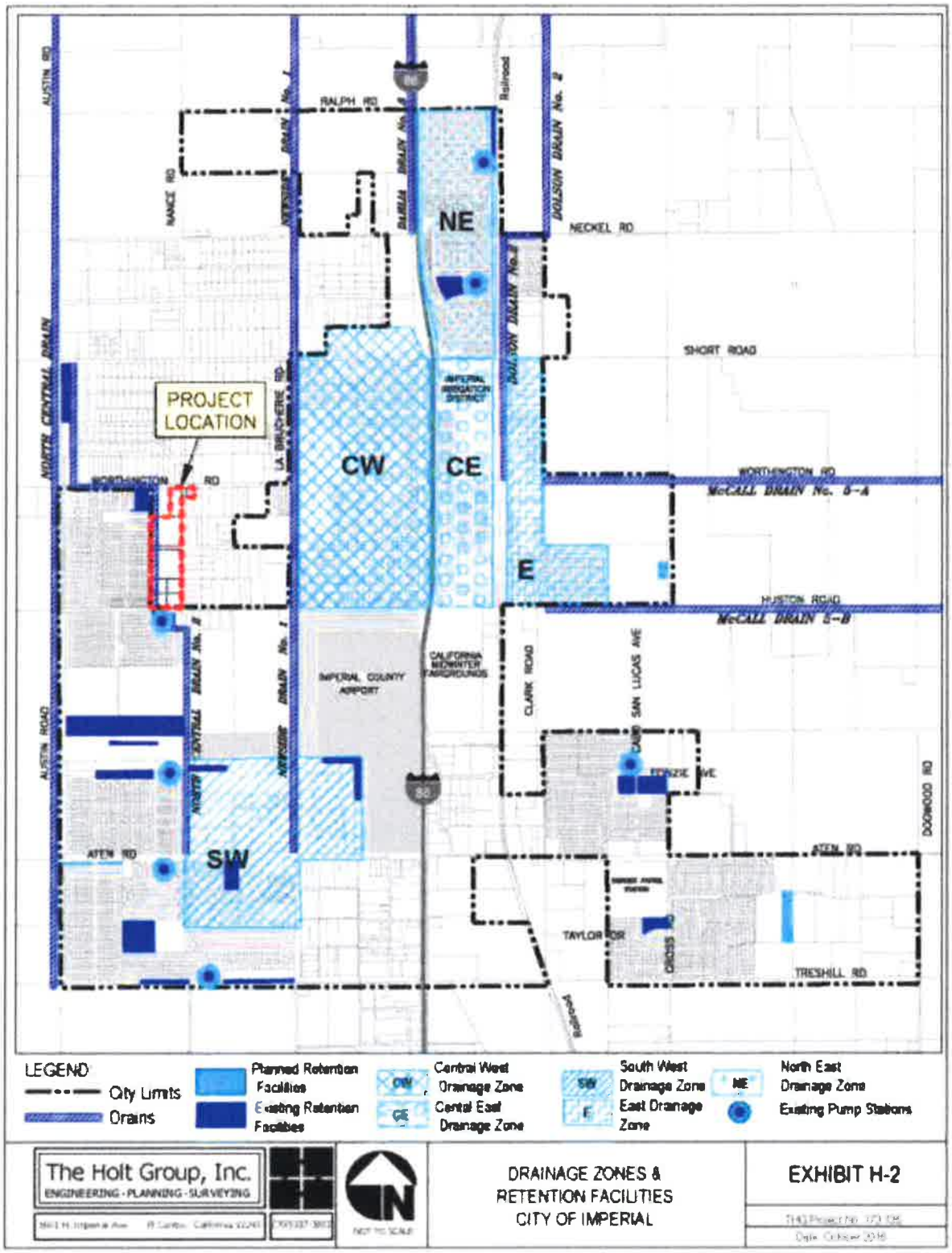
Groundwater- There are no aquifers, wells or other groundwater supplies on site or within the project vicinity that could be impacted. The groundwater in the site area is brackish and may be encountered at a depth of eight feet below the ground surface. Depth to groundwater may fluctuate due to localized geologic conditions, precipitation, irrigation, drainage and construction practices in the region. Based on the regional topography, groundwater flow is assumed to be generally towards the north within the site area. Flow directs may also vary locally in the vicinity of the site.

Potable water-The project site is within the City of Imperial Water Treatment Plant service area and potable water would be accessible to the project site as the nearest water distribution lines are located along the north side of Worthington Road and along the east side of Nance Road both of which measure 10" to 12" inches in diameter. The Imperial Water Treatment Plant performance and capacity is in compliance with requirements stipulated by the Water Resources Control Board and the existing capacity of 7 MGD as stipulated in the 2015 Service Area Plan is sufficient to serve the demand that would be generated from the proposed Russell Court development.

Stormwater- Unincorporated areas of Imperial County, such as the project site, manage surface water through stormwater drainage channels. Eventually, all stormwater channels convey stormwater flow into the New River or Alamo River or directly to the Salton Sea. The New River, Alamo River and surrounding irrigation laterals and drains owned by the IID are the main source of surface water outside of the Imperial community's storm drain system. North Central Drain No 2 is immediately adjacent to the west of the project site.

The City of Imperial does not have an interconnected stormwater system. The City owned facilities such as curb and gutter along streets, catch basins within improved developments are interconnected to both public and private retention basins and ultimately discharge into the IID managed canal drains. The primary drainage facilities receiving the City of Imperial's storm water, and managed by the Imperial Irrigation District, include the North Central Drain, North Central Drain No. 2, Newside Drain No. 1, Dahlia Drain No. 8, Dolson Drain No. 2 and the McCall Drain No. 5A and 5B. There are five primary drainage zones that tie into these drains as depicted in **Exhibit H-1 Drainage Zones and Retention Facilities**. The Russell Court Subdivision is located outside of any of these zones and will require an independent drainage collection system prior to transmitting and discharging into a permitted discharge location.

Exhibit H-2 Existing Drainage Zones and Retention Facilities



Hydrology Significance Criteria

Per State CEQA Guidelines, the proposed project would have an effect on water supplies or water quality standards, if any of the following occur:

- Violation of any water quality standards or waste discharge requirements;
- Substantial depletion of groundwater supplies or substantial interference with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level;
- Substantial alteration of the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river in a manner which would result in substantial erosion or situation on- or off-site or in flooding on- or off-site;
- Creation or contribution of runoff water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;
- Placement of housing within a 100-year flood hazard area as mapped on a Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or placement of structures within the 100-year flood areas flow as to impede or redirect the flood flows;
- Exposure of people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, inundation, seiche, tsunami, or mudflow.

Hydrology Impact Analysis

The project area is located south of Worthington Road between North Central Drain 2 and Nance Road along the concrete lined Newside Canal. The North Central Drain 2 forms the western property boundary. The North Central Drain 2 is an earth-lined canal used to transport irrigation runoff water to the New River. Stormwater flows from the City of Imperial, as well as from the City of El Centro which are also carried via the North Central Drain 2. The approximate 30-acre (29.98 acres) Russell Court Subdivision site is a vacant, permeable property.

The project will change the site from a natural undeveloped permeable site, to a developed 197 unit site that is substantially impermeable. The project proposes to incorporate a 2 acre park/retention basin with a total storm water volume of 314,032 Cubic Feet to accommodate the single family development. The proposed stormwater system will consist of the following: new AC streets, curb and gutters; crossgutters, new catch basins and underground (pipeline) storm drain system. A hydrology analysis was not prepared for the multi-family development. The 66-unit apartment complex will require its own independent retention basin and collection system. It is anticipated that the stormwater will be collected "on-site," retained for the minimum mandatory period and drained through a 12" storm drain line along the south side of Worthington

Road to the IID Central Drain No. 2 located west of the project. The discharge points, however shall be comprehensively analyzed and determined prior to the issuance of any construction or discharge permits. The IIID Central Drain No. 2 will remain as an open drain channel that will need to be blocked off from the development by a permanent wall or fence to protect residents from potential safety hazards.

It is anticipated that the proposed single family development will generate an estimated storm water volume of 300,606 C.F. and the proposed retention basin with a capacity of 314,032 C.F. which is more than sufficient to accommodate the anticipated design runoff volume. Per the hydrology study it is anticipated that the stored storm runoff will be drained/discharged within 24 hours into the IID Central Drain No. 2. The conveyance system and discharge point will need to be determined by the IID. A hydraulic analysis will need to be performed by the IID during their planning review process on the full development prior to issuing any discharge permits.

The effect on water supplies and water quality standards was considered as well as the potential for adverse impacts resulting from the project. Potential project-related water quality impacts may be associated with both short-term construction activities and long-term operation of the project. The findings of this section are derived from the Hydrology Reports incorporated under **Appendix F-Hydrology Reports** and its review and comment by City Engineering staff.

Construction Related Drainage and Water Quality Impacts

During the construction phase there is the potential for increased surface runoff and erosion to occur, however, the implementation of best management practices would reduce any impacts to a level less than significant. The City's review and approval of an adequate drainage plan will mitigate any potential impacts. The project will need to prepare a hydraulic analysis to the satisfaction of the Imperial Irrigation District and the City of Imperial and be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) complying with the State Water Resources Control Board General Permit and the City of Imperial MS4 Permit requirements in order to obtain NPDES permits. Erosion Control Plans including best management practices (BMPs) shall be prepared as a part of the SWPPP. As previously noted, the project site is adjacent to the Newside Canal and the North Central Drain No. 2, both of which are owned and operated by the Imperial Irrigation District. Their location may restrict project access during construction activities. The IID claims a prescriptive right of way on the slope of all existing canals, and requires encroachment permits for any level of access.

Operational Related Drainage and Water Quality Impacts

The proposed development of the area once operational will continue to result in large sealed surfaces that would alter the natural drainage pattern and could potentially contribute to runoff. All storm drain systems will be required to be designed according to California Regional Quality Control Board and City of Imperial standards. To reduce pollutants, Best Management Practices (BMP's) shall be incorporated or designed in conjunction with the storm drain system to treat urban run-off prior to entering the Imperial Irrigation District (IID)

system. The drainage systems shall consist of an on-site retention basins and conveyance systems.

The on-site stormwater conveyance system capacity for the project is based on storm water flow from solely the project site and not from areas outside of the project. The proposed storm water and retention system for the project will therefore need to be designed with the assumption that all infrastructure improvements will be completed prior to the construction of the dwelling units.

The project is required to incorporate improvements to mitigate a 100-year, 24-hour storm water flow. The proposed retention and drainage system design must further ensure the ability to store run-off from a 100-year storm and that all storm-water run-off will be able to be drained within a 72-hour period, calculations will need to be reviewed and approved by the City Engineer. If the storm water is unable to be drained within this 72-hour period, a mosquito abatement plan will be necessary. The construction of the proposed stormwater improvements will require an IID Easement and/or Permit, compliance with the City of Imperial design criteria, and a mosquito abatement plan absent a maximum 72 hour retention period.

As previously noted, the nearest drain to the proposed retention basin is the North Central Drain 2 maintained and operated by IID located 16 feet west from the site where stormwater is proposed to ultimately be discharged into. A discharge permit through the Imperial Irrigation District will be required. IID will need to perform a comprehensive hydraulic drainage system analysis. Improvement plans must demonstrate that they do not induce seepage from the project, nor create instability in any of the adjacent IID facilities. The drain is proposed to remain an open channel and serve the proposed development. For public safety concerns, a wall/fence will need to be erected between the proposed development and the North Central Drain No 2. The IID claims a prescriptive right of way on the slope of all existing drains and requires encroachment permits for any level of access and improvement, inclusive of the perimeter fence/wall required by IID from the developer.

As previously noted, the project site is also adjacent to the Newside Canal which abuts the project site to the east and aligns between the project site and Nance Road. Until most recently, the Imperial Irrigation District and the Local Agency Formation Commission had a standard requirement that developers underground all raw water canals abutting new development due to health and safety concerns. However, the Imperial Irrigation District Water Division has examined the Russell Court Subdivision and Apartment Complex as a whole, and determined that the Newside Canal may remain as an open channel and continue to facilitate operations for IID personnel. Additional exceptions may apply if it is specifically determined by the Imperial Irrigation District, during the planning review process, that additional conditions are necessary. For the purpose of this MND and consistent with IID communication, It is anticipated that the Newside Canal will remain an open channel with the exception of the single entry point along Nance Road near the Banta Road intersection.

The proposed access point to Area 1 single family residential off of Nance Road, at the Banta intersection, is proposed to be a minimum width of 80 feet of new required easement from

IID to accommodate the extension of Banta Road and access to the Subdivision. This crossing of the Newside Canal will need to be designed and pipelined by the Imperial Irrigation District, at the expense of the developer, the remaining canal sections will remain open as per IID letter dated December 12, 2016.

Hydrology Conclusions

The project will need to incorporate a stormwater collection system to support both the single family residential development and apartment complex. The proposed park/retention basin is fully capable of taking care of the stormwater volume to be generated by the single family development during a major storm event but does not take into account the multi-family development which will require the design and incorporation of an independent stormwater collection system. It has been calculated that the basin accommodating the single family units would drain in approximately 24 hours at full volume, which is well within the 72 mandatory minimum required. The proposed developments are further adjacent to open drains and water channels and all finish floor elevations will need to be constructed a minimum of 12" above the adjacent top of curb or higher than the adjacent Central Drain top of berm, whichever is higher, to prevent any potential flooding of structures. Additionally the channels will need to incorporate improvements to reduce hazards and ensure safety, including but not limited to perimeter walls/fences.

Hydrology Impacts & Mitigation Measures

Potential impacts to hydrology can be significant without proper mitigation measures. It has been determined that special conditions and measures are necessary under design and for the purpose of safety and reduction of potential hazards.

Impact HQ-1- Construction activities may result in loss of topsoil and/or erosion.

Mitigation Measure HQ-1- The project will need to prepare a Storm Water Pollution Prevention Plan (SWPPP) complying with the State Water Resources Control Board General Permit and the City of Imperial MS4 Permit requirements in order to obtain NPDES permits. Erosion Control Plans including best management practices (BMPs) shall be prepared as part of the SWPPP.

Impact HQ-2- Surface runoff will increase significantly as a result of the project necessitating a comprehensive stormwater collection and discharge system. Any proposed retention basin and storm water conveyance system will discharge into and thus impact the North Central Drain 2 which is owned and operated by the Imperial Irrigation District.

Mitigation Measure HQ-2-The project shall incorporate independent retention basins for the single family subdivision and the apartment complex development for stormwater infrastructure to address the stormwater demand of both prior to transmitting to a comprehensive discharge system. The retention facilities' design and improvement plans shall be reviewed and approved by the IID. The developer shall follow the requirements set forth in the Imperial Irrigation District's Developer Project Guide. A comprehensive hydraulic

drainage system analysis will be required to be performed by the IID. Fees required to conduct this system analysis will be the responsibility of the developer.

Impact HQ-3 The project site is adjacent to a number of canals and drains owned and operated by the Imperial Irrigation that may restrict project access. The IID claims a prescriptive right of way on the slope of all existing canals and drains, and requires encroachment permits for any level of access, and requires barrier walls/fences in order to prevent pedestrian hazards from channels they have authorized to remain open.

Mitigation Measure HQ-3 The developer shall not use IID's canal or drain banks to access the project site. A perimeter wall or fence shall be constructed between the proposed development and the IID channels in order to address safety concerns. The wall/fence shall be constructed to the satisfaction of IID to meet the minimum safety requirements and will require perimeter landscaping by the City of Imperial for those walls visible from a public roadway. Any abandonment of district easements shall be approved by IID based system requirements. The IID may further claim additional secondary easements/prescriptive rights of ways to ensure operation and maintenance of IID's facilities can be maintained and are not impacted.

Impact HQ-4 The project site directly abuts canal banks and drain banks that are at a higher elevation than the project site which may pose a flooding concern. Additional concerns include run-off that may be generated from the Banta Road/Nance Road intersection and onto the project site.

Impact HQ-4 The finish floor elevation of all on-site development shall be 18-inches above the highest top of curb at the south side of the development. An updated hydrology report may be required to be submitted to the City of Imperial to support final improvement plans.

3.1.7 Land Use and Planning

Land Use and Planning impact analysis evaluates changes of the current land use and planning designation. It analyzes the potential to physically divide a community. Additionally it examines the potential to conflict with applicable land use plans, policies, including adopted zoning ordinances and development standards. Additionally it evaluates any conflicts with any applicable habitat conservation or preservation plans. Evaluation of impacts is based on the potential to change existing measures in place. This land use and planning analysis addresses the existing land use and planning measures while establishing mitigation measures to reduce any potential inconsistencies with the general plan or ordinances.

Existing Conditions & Setting

The proposed project site is currently undeveloped land located on the northwest corner of Brewer Road and Nance Road within an unincorporated area of the County of Imperial abutting the City of Imperial. Within County jurisdiction, the area is zoned A1-L1U which is rural residential, one acre minimum lots, intended for limited agriculture production within urban boundaries (per the Imperial County Zoning Ordinance). The City of Imperial, General Plan-Land Use Element, designates the area for rural to low density residential. The project is also located within the Imperial County Airport Land Use Compatibility Plans' Zone C thus subject to consistency review to both the City General Plan and the IC Airport Land Use Compatibility Plan.

City of Imperial General Plan and Zoning Ordinance

Per the General Plan of the City of Imperial, the current designation of the project site falls in the Residential Low Density category which is intended to provide a transitional area between the rural densities and other higher density residential uses. The density of this category is 1 to 2 dwelling units per acre and typically lot sizes average 20,000 square feet and building intensities are up to 35% as noted in the Standards and Population Density Table below.

Table LU-1
Standards for Population Density

Land Use Category	Units per Acre	Building Intensity
Residential Rural	.50 to 1.0	35%
Residential Low	1 to 2	35%
Residential Low Medium	2 to 5	50%
Residential ~~Medium~~ Condominium	5 to 20	50%
Residential ~~High~~ Multiple Family (Rental)	20 to 30	60%
Agricultural	1 per 2.5 acre	35%

City of Imperial Land Use Element, 1992.

The proposed densities of the Russell Court Subdivision cannot be accommodated under the Residential Low Density land use designation. Zoning designations that fall under the Residential Low Density Category are specific to the RL-Residential Low Zone. Changing the Land Use Designation from Low Density Residential to Low Median Density Residential and Multiple Family (Rental) Residential to accommodate the proposed higher densities will necessitate a General Plan Amendment and Zone Change. **Table LU-2 Development Standards by Land Use and Zone** describes the differences in the development standards between the Residential Low RL-Zone and the proposed R1-Residential Single Family Zone and RA-Residential Apartments Zone. All zones allow up to a 52 FT height.

Table LU-2
Development Standards by Land Use and Zone

Land Use Category:	Low Density Residential	Low Medium Density Residential	Multiple Family (Rental) Residential
Zoning:	RL-Residential Low Density	R-1 Residential Single Family	RA- Residential Apartment
Maximum Units/Acre	2.0	6.0	30.0
Net Lot Area	20,000	6,000	7,500
Lot Width Minimum	100 FT	65 FT	150 FT
Lot Width-Cul-De-Sac	30 FT	30 FT	NA
Lot Depth	150 FT	100 FT	165 FT

City of Imperial Land Use Element 1992 and City of Imperial Zoning Ordinance 2014.

The proposed Tentative Tract map further incorporates lots under the 65 FT lot width minimums established by the City of Imperial Zoning Ordinance. The Developer has applied for a Zoning Text Amendment to reduce the minimum lot width standards from 65 FT in R-1 Residential Single Family zones to 55 FT minimum width which would be a policy amendment for all R-1 Zones and not specific to the Russell Court Subdivision. If some of the cul-de-sac lots fall below 10% of 6,000 minimum lot areas, a variance would further be required.

Additionally, the developer has applied for a variance to address the reduced lot area for the lots affected by the cul-de-sacs in an effort to provide some design relieve without affecting the minimum radius requirements of the cul-de-sacs which are minimums for emergency access by fire apparatus and vehicles. The variance would be granted at the discretion of the Planning Commission.

Imperial County Airport Land Use Compatibility Plan

The project is also located within the Airport Land Use Compatibility Plans' Zone C which is a common traffic pattern for aircraft and densities are regulated under the specific overlay

zones. Zone C allows for maximum densities of 6 residential units per acres with a minimum of 15% open land as noted in Table LU-3 below.

Table LU-3
IC Airport Land Use Compatibility Criteria

Zone	Location	Impact Elements	Maximum Densities		Required Open Land[3]
			Residential (du/ac)[1]	Other Uses (people/ac)[2]	
A	Runway Protection Zone or within Building Restriction Line	• High Risk • High noise levels	0	10	All Remaining
B1	Approach/Departure Zone and Adjacent to Runway	• Substantial risk – aircraft commonly below 400 ft. AGL or within 1,000 ft. of runway • Substantial noise	0.1	100	30%
B2	Extended Approach/Departure Zone	• Significant risk – aircraft commonly below 800 ft. AGL • Significant noise	1	100	30%
C	Common Traffic Pattern	• Limited risk – aircraft at or below 1,000 ft. AGL • Frequent noise intrusion	6	200	15%
D	Other Airport Environs	• Negligible risk • Potential for annoyance from overflights	No Limit	No Limit	No Requirement

Zone	Additional Criteria		Examples	
	Prohibited Uses	Other Development Conditions	Normally Acceptable Uses[4]	Uses Not Normally Acceptable[5]
A	• All structures except ones with location set by aeronautical function • Assemblages of people • Objects exceeding FAR Part 77 height limits • Hazards to flight[6]	• Dedication of avigation easement	• Aircraft tiedown apron • Pastures, field crops, vineyards • Automobile parking	• Heavy poles, signs, large tree, etc.
B1 and B2	• Schools, day care centers, libraries • Hospitals, nursing homes • Highly noise-sensitive uses • Above ground storage • Storage of highly flammable materials • Hazards to flight[6]	• Locate structures maximum distances from extended runway centerline • Minimum NLR[7] OF 25 dBA in residential and office buildings • Dedication of avigation easement	• Uses in Zone A • Any agricultural use except ones attracting bird flocks • Warehousing, truck terminals • Single-story offices	• Residential subdivisions • Intensive retail uses • Intensive manufacturing or food processing uses • Multiple story offices • Hotels and motels
C	• Schools • Hospitals, nursing homes • Hazards to flight[6]	• Dedication of overflight easement for residential uses	• Uses in Zone B • Parks, playgrounds • Low-intensity retail, offices, etc. • Low-intensity retail, offices, etc. • Low-intensity manufacturing, food processing • Two-story motels	• Large shopping malls • Theaters, auditoriums • Large sports stadiums • Hi-rise office buildings
D	• Hazards to flight[6]	• Deed notice required for residential development	• All except ones hazardous to flight	

Land Use and Planning Significance Criteria

For this analysis, impacts to land use and planning resulting from the proposed project would be considered potentially significant if any of the following occurs:

- Physically divide an established community.
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

Land Use and Planning Impact Analysis

There are two land use plans that the proposed project is governed under: The City of Imperial General Plan and the Imperial County Airport Land Use Compatibility Plan. The City of Imperial's General Plan Land Use Element was last adopted in 1992 and is currently going under an update. A number of new State policies will be addressed under the current update, including compliance with AB 32 which fights global warming by establishing a comprehensive program to reduce greenhouse gas emissions from all sources throughout the state. The Imperial County Airport Land Use Compatibility Plan is also outdated, adopted in 1996.

General Plan & Zoning Ordinance Impacts -Per the 1992 General Plan of the City of Imperial, the current designation of the land falls in the Residential Low Density category and thus as previously noted, the project will require a General Plan Amendment in order to accommodate the higher densities of the proposed Low Medium Designation and higher densities of the proposed Multiple Family Designation. Accordingly, a corresponding pre-zone for R-1 Residential Single Family and RA Residential Apartment would occur. The planned and proposed land uses, however are all residential in nature and the proposed change in density will not result in any adverse environmental effects.

The increase in densities via the proposed General Plan Amendment and Zone Changes further support AB 32 The California Global Warming Solution Act of 2016. The principal goal of this act is to encourage development and implementation of plans that lead to significant reductions in greenhouse gas emissions (GHGs) in a manner consistent with the State Planning Priorities. The proposed changes to the adopted General Plan are further proposed to be consistent as follows: promote infill development and higher densities, establish infrastructure strategies to maximize the use of existing facilities thus resulting in affordable, compact, higher density development that will encourage non-motorized transportation or reduced distance travel.

The proposed higher densities are strategically located within close proximity to existing water and sewer facilities and services and prevents urban sprawl. The increased densities are also located within 2,160 lineal feet of an existing elementary school and high school

which further encourages walking. Thus the proposed amendments are not anticipated to result in any adverse effects to land use and planning.

Development Standard Impacts- As previously noted the proposed single family subdivision is proposing lot widths and net areas that deviate from the current adopted standards. The City of Imperial has a minimum lot width standard of 65' for standard lots, and 30' for cul-de-sac lots. Deviations from these standards are proposed as follows:

- **Minimum Lot Width-**The developer's current tentative tract map indicates all single family lots as having a lot width of 55' with the exception of cul-de-sac lots which vary in lot width but fall within the minimum standards. In order to accommodate the reduced lot widths a Zoning Text Amendment is proposed to reduce the minimum lot width standards of the City of Imperial from 65' to 55' within all R-1 Zones. This text amendment would beneficially impact all R-1 Zones as it allows for more flexibility and may reduce the shared cost of public infrastructure such as frontage streets, sewer lines, and water lines by increasing the number of benefitting lots.
- **Minimum Lot Area-**The minimum net lot size for the R-1 Zone is 6,000 SF. City staff has the authority to deviate by as much as 10% or as low as 5,400 SF. All standard lots meet these minimum standards, however, the net lot area for cul-de-sacs may deviate below the 5,400 SF minimums. The project would then necessitate a variance from these adopted standards given the unusual circumstances and configuration of the affected lots, if deviation from this were to occur.

Imperial County Airport Land Use Compatibility Plan- As noted under the Hazards section of this MND and under this section as Existing Conditions, the proposed project is within Zone C of the Airport Land Use Compatibility Plan under which densities are restricted to 6 units per acre. The aforementioned proposed General Plan Amendment and Zone Change would average a maximum density of 8.6 dwelling units per acre, cumulatively, which exceeds the Imperial County Airport Land Use Compatibility's Plan maximum of 6 dwelling units per acre. The RA-Residential Apartment zoning in itself far exceeds this density at 30 dwelling units per acre. Thus the project, as proposed, is determined to be inconsistent with the 1996 Imperial County Airport Land Use Compatibility Plan.

The City Council of the City of Imperial has the authority to overrule any finding of incompatibility that may be made the Imperial County Airport Land Use Commission. Aeronautics Law provides that the findings must show that the local agency action is consistent with the purposes of article stated in Section 21670 of Aeronautics Law, updated on August, 2015, which consists of the two following findings if it plans to allow a use that has been deemed incompatible to the ICALUCP:

1) ***The project will not adversely impact the ability to provide for the orderly development of the public use airport and the area surrounding the airport so as to promote the overall goals and objectives of the California airport noise standards adopted pursuant to Section 21669 and to prevent the creation of new noise and safety problems.***

2) ***The project will not adversely impact the ability to protect the public health, safety and welfare by ensuring the orderly expansion of airports and incorporates land use measures that minimize the public's exposure to excessive noise and safety hazards within the areas around the public airport to the extent that these areas are not already devoted to incompatible uses.***

The Noise Quality Section and Hazards Section of this Mitigated Negative Declaration ensure noise levels are within the established thresh-holds and that any potential hazards are mitigated to a less than significant impact. The identified land use inconsistencies to the 1996 adopted Imperial County Airport Land Use Compatibility Plan will need to be addressed by the Imperial City Council after considering potential overriding findings which may satisfactorily address Section 21670 of Aeronautics Law as follows:

1) ***The project will not adversely impact the ability to provide for the orderly development of the public use airport and the area surrounding the airport so as to promote the overall goals and objectives of the California airport noise standards adopted pursuant to Section 21669 and to prevent the creation of new noise and safety problems.***

   The proposed Russell Court Subdivision is located 2,000 feet northwest of the Imperial County Airport, separated by existing low density residential development, and would not affect the orderly development of the Imperial County Airport as it is not proposed adjacent to or located on any airport property, nor within any property that could logically be acquired for the purpose of expanding the airport given the developed condition of the surrounding land uses and between the Airport and the proposed Russell Court Subdivision. Thus the ability for the orderly development of the area surrounding the Imperial County Airport would not be affected by the proposed project and will not result in any new noise or safety related issues.

   All potential safety concerns have been satisfactorily addressed in the final Mitigation Measures and thus, the proposed two-story residential and apartment building heights shall be restricted to ensure that they are not a hazard to Air Navigation as per the on-line Notice Criteria Tool or any subsequent review by the Federal Aviation Administration.

   Additionally, the Studies have determined that there are no potential noise impacts for the proposed residential land uses that are considered sensitive receptors to excessive noise levels. The FAA has established 65 decibels (dB) Community Noise Equivalent Levels (CNEL) as the noise standard associated with aircraft noise. The IC Airport Land Use Compatibility Plan establishes a noise exposure level of 55 dBA or less as normally acceptable for single family areas. The Noise Study prepared by TRC Environmental Corporation (**Appendix G-Noise Study)** noted that all three project sites would have acceptable exterior noise levels under standard

residential construction methods (Please see Noise Section of this MND for more details).

2) ***The project will not adversely impact the ability to protect the public health, safety and welfare by ensuring the orderly expansion of airports and incorporates land use measures that minimize the public's exposure to excessive noise and safety hazards within the areas around the public airport to the extent that these areas are not already devoted to incompatible uses.***

   As previously noted, the Russell Court Subdivision will not expose individuals to excessive airport noise levels. The proposed use was found compatible with the surrounding land uses and would not adversely impact public health, safety, or general welfare. The expansion of the Imperial County Airport is already restricted by existing development, nonetheless, the Russell Court Subdivision incorporates mitigation measure to ensure that the publics exposure to safety hazards is minimal. It has been determined that the project will need to obtain a determination from the FAA of No Hazard to air navigation during the design of any two story buildings.

The City Council, as the local governing body has the authority to override compatibility determinations per the California Public Utilities Code section 21675.1 (d): "The City or county may overrule the commission, by a two-thirds vote of its governing body, if it makes specific findings that the proposed action, regulation, or permit is consistent with the purpose of this article, as stated in Section 21670." The Imperial City Council will need to officially make the aforementioned findings prior to or concurrent to the requested discretionary approvals.

Land Use and Planning Conclusion

The planned and proposed land uses will result in amendments to the City's 1992 General Land Use Element, however, the proposed land use is for continued residential and the changes in increased density are more in line with the States objectives under AB 32 to reduce Greenhouse Gas emissions via more compact and infill development. The proposed increase in densities, however, has resulted in incompatibilities with the Imperial County Airport Land Use Compatibility Plan and will necessitate findings to overrule any determination by the Imperial County Airport Land Use Commission of incompatibility. The proposed change in density are not anticipated to result in any adverse environmental effects once all mitigation measures are followed.

Land Use & Planning Impacts & Mitigation Measures

The land use and planning findings under this section are closely tied to findings and mitigation measures found under the Hazards section of this MND and the Noise section of this MND. The following mitigation measures to address land use impacts are necessary in addition to those mitigation measures noted in the aforementioned sections, and complement one another.

Impact LU-1 – The Imperial County Airport Land Use Compatibility Plan establishes maximum densities for Zone C of 6 dwelling units per acre which will be exceeded by the proposed Russell Court Subdivision, thus said used is determined to be incompatible with the 1996 adopted IC ALUCP.

Mitigation LU-1 – The Imperial City Council shall review all facts in evidence and make findings of consistency with the purposes of Section 21670 of Aeronautics Law, updated on August, 2015 prior to, or concurrent, with the requested discretionary approvals.

3.1.8 Noise

Noise impact assessments typically evaluate potential changes in existing noise conditions that could result from implementation of a proposed project. Potential changes may be beneficial if they reduce the number of sensitive receptors exposed to unacceptable noise levels. Conversely, changes may be detrimental if they result in increased exposure to unacceptable noise levels. While an increase in noise levels due to introduction of a new noise source can create an impact on the surrounding environment, the human reaction to various levels of noise is highly subjective, and varies from person to person. Evaluation of impacts to noise levels is based on the potential for the project to create an impact in the surrounding environment or for the existing environment to create an impact on the proposed project. This analysis addresses increased noise levels in the immediate project area that would result from or potentially affect the proposed project as concluded by TRC Environmental Corporation.

Existing Conditions & Setting for Noise

The land uses immediately bordering the site consist mainly of low density residential uses with the exception of the Imperial County Airport, located just 2000 feet east. The Union Pacific railroad is also located 1.21 miles and State Route 86 is located one mile east of the project site. Existing sensitive receptors immediately bordering the proposed project site include the Ben Hulse Elementary School and Imperial High School which are located approximately 2,600 feet east.

Airport Noise-As previously noted the project site is located within the Imperial County Airport Overlay Zone, and more specifically Zone C which is a common traffic pattern zone for aircraft. The nearest runway at the Imperial County Airport is located approximately 2,000 feet from the Project site. The most restrictive land use compatibility noise exposure level for residential development is 55 dBA CNEL. However, sound levels up to 65 dBA CNEL may be considered acceptable in some cases. The project site is exposed to 50dBA CNEL from airport related noise according to exposure contours established for the Imperial County Airport.

Highway Noise- State Route 86 is located one mile east from the proposed Project site. The Imperial County and the City of Imperial Noise Elements provide noise exposure levels for major roadways and freeways. Under the Noise Elements, SR 86 is defined as a freeway, and has the highest noise exposure level. As provided in the City's Noise Element, a distance of 500 feet from the freeway is required in order to reduce SR 86 noise exposure levels to 60 dBA CNEL. At the much larger distance of one mile, the noise exposure level from SR 86 would be expected to be well below the 55 dBA CNEL level considered normally acceptable level for residential development.

Railroad Noise-The Imperial County and the City of Imperial Noise Elements also provide noise exposure levels for railroads. Both Noise Elements indicate an existing CNEL of 51 dBA is achieved at a distance of 2,000 feet from a railroad. As previously noted, the Southern

Pacific railroad is located approximately 6,700 feet (1.2 miles) east of the Project site. Accordingly, railroad noise exposure levels would be well below the 55 dBA CNEL level considered normally acceptable for residential development.

Noise Significance Criteria

For this analysis, impacts to noise resulting from the proposed project would be considered potentially significant if any of the following occurs:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels.
- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

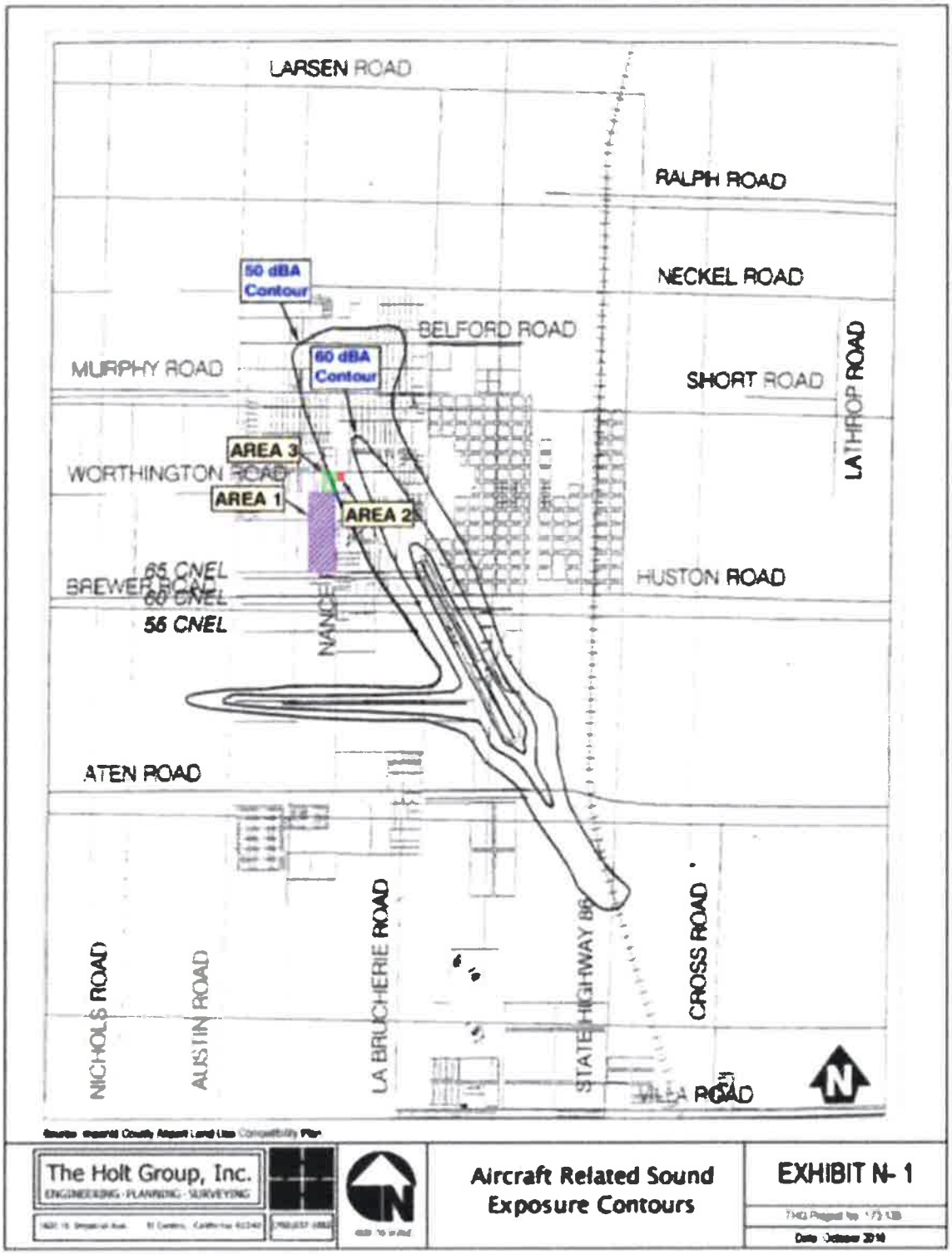
Noise Impact Analysis

TRC Environmental Corporation conducted a noise assessment of the proposed Russell Court Subdivision project in March 2016 (**Appendix G–Noise Study**). The assessment evaluated the compatibility of the existing noise environment with project use and potential impacts both during construction and operation of the project on the surrounding area.

Existing Noise Exposure Levels for Project Compatibility

As previously noted, the Imperial County Airport is the primary noise generator in the project vicinity at 2,000 feet from the project site. The Imperial County Airport Land Use Compatibility Plan provides existing sound exposure contours for the area surrounding the airport. The range of exposure levels considered to be normally acceptable is from 55dBA CNEL up to 65 dBA CNEL. As previously noted and as depicted in **Exhibit N-1 Aircraft Related Sound Exposure Contours**, the northeast portion of the project site falls within the 50 and 60 dBA Contour while the rest of the project is well below 50 dBA.

Exhibit N-1 Aircraft Related Sound Exposure Contours



The existing exposure levels for project compatibility are noted below for each of the respective project areas:

- **Area 1** (130 Unit Single Family Subdivision): The proposed site is located outside of the minimum 55 dBA CNEL noise exposure contour (See Figure 1). This noise exposure level would be considered normally acceptable.
- **Area 2** (Single Family Residence): The proposed site is mostly located outside of the minimum 55 dBA CNEL contour, with the northeastern portion of the area lying between the 50 and 60 dBA CNEL contours. This level of noise exposure is normally acceptable and marginally acceptable as identified by the Airport Land Use Compatibility Plan and would not necessitate any special construction requirements.
- **Area 3** (Apartments): The proposed site is located between the 50 dBA and 60 dBA CNEL noise exposure contour. This noise exposure level would be considered marginally acceptable by the Imperial County Airport Land Use Compatibility Plan but acceptable by the City's Zoning Ordinance.

Construction Related Noise Impacts

Construction would occur over a period of twelve to twenty four months. The construction process for a residential development typically includes the following phases/activities: Ground clearing; Excavation; Foundations; Building construction; Finish and cleanup. In general, heavy equipment (bulldozers, dump trucks, cement mixers) will be used during excavation and concrete pouring activities. Noise is generated during construction primarily from diesel engines which power the equipment. Exhaust noise usually is the predominant source of diesel engine noise.

The construction equipment anticipated to be used is typical to residential construction projects as noted in **Table N-1-Construction Equipment Noise Generation**. Typical noise levels from these construction sources reference a distance of 50 feet out to 1,000 feet and could potentially be utilized at any location within the project site. The closest approach any one piece of equipment would be to any bordering residential uses is approximately 100 feet. It is important to note that the equipment presented is not used in each phase of construction. Further, the construction noise levels presented are those which would be experienced for people outdoors. A building (house) will provide significant attenuation for those who are indoors. Additionally, noise related to project construction will be of a temporary nature and the equipment used is not generally operated continuously, nor is the equipment always operated simultaneously. There will therefore often be times when no equipment is operating and noise will be at ambient levels.

Table N-1
Construction Equipment Noise Generation

Equipment	Maximum Noise Level (dBA)				
	50 Feet	100 feet	200 feet	500 feet	1,000 feet
Backhoe	78	72	66	57	50
Dump Truck	77	71	65	56	49
Crane	81	75	69	60	53
Excavator	81	75	69	60	53
Scraper	84	78	72	63	56
Loader	79	73	67	58	51
Paver	77	71	65	56	49
Concrete Mixer Truck	79	73	67	58	51
Grader	85	79	73	64	57

Source: TRC Environmental Corporation 2016 Noise Study/Federal Highway Administration, 1978.

Typical usage factors for this type of construction equipment were applied by TRC Environmental Corporation to the above sound levels in order to arrive at the average sound level that may occur during a typical workday (irrespective of workday duration). The usage factors account for the fact that equipment are not always operated at full throttle conditions, and are not used for an entire workday. **Table N-2-Sound Levels of Construction Equipment per Workday**, provides the construction sound levels, adjusted to reflect a typical workday, expected at various distances from the site, from 100 feet out to 1,000 feet, covering the range of distances to nearby residences.

Table N-2
Sound Levels of Construction Equipment per Workday

Equipment	Adjusted Noise Level for Workday			
	100 feet	200 feet	500 feet	1,000 feet
Backhoe	68	62	53	46
Dump Truck	67	61	52	45
Crane	67	61	52	45
Excavator	71	65	56	49
Scraper	74	68	59	52
Loader	69	63	54	47
Paver	68	62	53	46
Concrete Mixer Truck	69	63	54	47
Grader	75	69	60	53

Source: TRC Environmental Corporation 2016 Noise Study

The local noise ordinances and noise elements limit construction activity to specific times of the day. The City of Imperial Noise Element prohibits construction between the hours of 8 pm and 7 am. The Imperial County Noise Element prohibits construction between the hours of 7 pm to 7 am weekdays, 5 pm and 9 am on Saturdays. No construction is allowed

on Sundays and holidays. The Imperial County Noise Element further limits construction sound levels to no greater than 75 dBA as an Leq over an 8 hour period as measured at any noise sensitive receptor. The noise study determined it was unlikely that construction sound levels would exceed the 75 dBA limit over an 8 hour workday at any bordering noise sensitive locations.

A review of the calculated construction levels determined that construction noise will exceed the estimated existing daytime ambient noise level of 55 dBA at distances out to about 500 to 1,000 feet. Therefore, construction noise at times will be louder than existing daytime ambient noise levels at the most proximate residences. Lower construction noise levels would be experienced at locations further from the Project site, including at the area schools (approximately 2,600 feet away). Additionally, lower sound levels can be expected indoors up to 27 dBA lower with the windows closed and 17 dBA with the windows open. Project construction would result in short-term impacts, but the impacts would be temporary and intermittent.

Construction activities can also have the potential to generate groundborne vibration and groundborne noise, depending on the type of construction equipment in use and the distance to the receiver. The human response thresholds for vibration indicate that vibration is barely perceptible with a PPV (inches per second) of 0.035. **Table N-3 Vibration Source Levels for Construction Equipment**), provides vibration source levels for some construction equipment expected (or representative of the equipment) to be utilized for the proposed project, which have been normalized to a reference distance of 100 feet, which is approximately the closest any construction equipment would be to any one single existing residence, none of which exceed the barely perceptible threshold.

Table N-3
Vibration Source Levels for Construction Equipment

Equipment1	PPV at 100 Feet
Loaded Truck	0.009
Large Bulldozer	0.01
Small Bulldozer	0.0004

Source: TRC 2016 Noise Study and Caltrans 2006

Operation Related Noise Impacts

The proposed Project is a residential development. No major noise generating sources will be associated with the Project. Sounds generated will be typical of any residential development, and be situated among existing residential land uses. The Project therefore would not result in new sources of noise that would expose surrounding noise sensitive areas to excessive noise levels while in operation.

Noise Assessment Conclusion

Although no significant project related noise impacts are anticipated, standard mitigation measures will be required to ensure the welfare of sensitive receptors in the surrounding community during construction activities.

Noise Impacts & Mitigation Measures

Impact N-1- A substantial temporary increase in ambient noise levels in the project vicinity occur during the construction activities that may affect existing sensitive receptors.

Mitigation N-1-Prior to the issuance of a Notice to Proceed, the City of Imperial Planning Director shall ensure the following noise control measures are shown on applicable grading and building plans as details, notes or as otherwise appropriate:

- Construction scheduling will comply with City of Imperial Noise Element and Imperial County noise standards, whichever is stricter in setting forth maximum noise levels as related to potentially sensitive surrounding land uses.
- Construction scheduling for the project area shall be limited to the hours of 7 a.m. and 7 p.m. Monday through Friday with the exception of legal holidays. The Building Department may issue a written "early work permit" if hot or inclement weather creates a need to start earlier than 7 a.m.
- The construction contractor shall ensure that stockpiling and vehicle-staging areas are located as far as practical from noise-sensitive receptors during construction activities.
- During construction, all fixed equipment (e.g., air compressors, generators, etc) shall be located as far from the residential properties as is reasonably feasible and directed away from sensitive noise receivers.
- During construction, contracts shall specify that all construction equipment shall be equipped with mufflers and other suitable noise attenuation devices and that they be operating adequately including properly working mufflers.

3.1.9 Public Services

This Public Services section evaluates the availability of services for the proposed project and any potential impacts that the proposed project may have on the City's current level of services or any other service provider. The information used to complete this assessment was largely derived from the City's Service Area Plan adopted in 2015 (**Appendix H-Imperial Service Area Plan**), unless otherwise noted. The service assessment takes into account the current and future demand for public facilities and services, and describes how these facilities and services may be affected by the proposed Russell Court Subdivision.

Public Services Setting & Existing Conditions

Fire Protection Facilities-Fire Protection facilities include the fire station and other support equipment including firefighting equipment such as fire engines, water tenders, and other firefighting units. Fire facilities also include the staffing level needed to man and operate the aforementioned equipment and deliver emergency and fire-protection services. The City of Imperial contracts with the County of Imperial for fire protection and emergency services in accordance with the Agreement for Fire Protection Services dated June 18, 2014. The current facility (Fire Station 4) is located at 2514 La Brucherie Road in Imperial less than ¾ miles of the current project site.

Police Protection & Law Enforcement Facilities- Police facilities include the police station located at 424 South Imperial and other support facilities and equipment including ten patrol vehicles and six support vehicles which are owned by the City of Imperial. Police facilities further includes the staffing level needed to provide law enforcement and protection services. The City has at least two police officers on duty per twelve hour (12) shifts. Dispatching services are contracted through the City of El Centro Police Department. As of 2015, the City was operating at a deficit of -2,611 SF in law enforcement building space and -10 Officers, -4 Vehicles, and -3 Volunteers per their adopted standards of 1.6 officers per 1,000 in population and two officers per vehicle. Plans are already in progress for the construction of a Public Safety Building.

Library Facilities- Library facilities include the library space at the Imperial Public Library Building located at 200 W. 9th Street, the contents of the library, as well as the Staff that manage the library. It also includes any support equipment such as computers, copy machines, and other office equipment that may be available to the general public. The library is under a 3,474 SF expansion and can adequately serve the projected population growth through 2025.

Park and Recreation Facilities-Parks and recreation facilities include open space areas, both improved and unimproved for the purpose of recreational use. Facility amenities within the parks may include swings, slides, and shade structures for the use of the public. As of 2015,

the City of Imperial has over 52 acres of recreational/open space areas which is a 10 acre surplus over the performance standard of 3 acres per 1,000 in population.

Sanitary Sewer Facilities–Wastewater treatment and sewer facilities include the City of Imperial Wastewater Pollution Control Plant (Wastewater Treatment Plant) and the sewer collection system that collects and conveys the wastewater to the wastewater treatment plant. Sanitary Sewer Facilities also includes various sewer lift stations that are owned by the City of Imperial. The wastewater treatment plant has an existing capacity of 2.4 MGD and is operating at 1.73 MGD or 72 percent, which is more than sufficient capacity to address the wastewater demands of the Russell Court Subdivision. It is anticipated that expansion will not be required until 2025.

Domestic Water Facilities–Water treatment and distribution facilities include the City of Imperial's Water Treatment Plant and the distribution pipelines that convey potable water to residences and business within the service areas. Water facilities also include water transmission lines and pump systems necessary for conveyance of water. Existing water facilities include a 7MGD Water Treatment Plant, 6MG of Storage Tanks, eight pump stations, and distribution lines. The City is currently operating at a 2 MGD demand or 29 percent of the Plant's capacity. The City's existing capacity is more than sufficient to address the service demand from the Russell Court Subdivision of less than 100 gallons per day (502 gallons per dwelling unit average).

Schools & Educational Services- The subject project site lies within the Imperial Unified School District. There are two elementary schools, TL Waggoner Elementary and Ben Hulse Elementary, one middle school (Frank Wright Middle School) and one high school (Imperial High School). There is also Holbrook School which is an adult continuation school. School facilities are currently at capacity. The school system is in need of a new elementary school facility which is included in the 2016 Imperial Unified School District School Facility Needs Analysis. The district currently owns a site which is intended to accommodate Cross School Elementary, and additionally proposes to construct 5 classroom buildings, an administration building, and a multipurpose room. Ben Hulse Elementary school has expansion plans consisting of one library/computer lab building, and ten elementary class room buildings (two of which are for kindergarten). Imperial High School classroom expansions plans include six new classroom buildings, and eight new relocatable classrooms. The master plan also includes modernization of a number of school facilities. The aforementioned plans are through the year 2021.

County Facilities and Services– The project site is currently located within an unincorporated area of Imperial County within the Sphere of Influence of the City of Imperial which requires additional impact fees to the County. The County of Imperial collects Development Impact Fees during the annexation process for continued County provided services for General Government Services, Sherriff's Services, and Parks Services. General Services are provided to residents in both the incorporated and unincorporated areas by the county in the form of

health and youth services, veterinary programs and courthouse services. Parks are provided both to unincorporated and incorporated areas by the County by providing parkland, amenities, community centers, recreational facilities, and vehicles and equipment. Sherriff Services are provided by the County via the operation of the County Jail and Coroner's Office services to both unincorporated and incorporated areas. The development impacts fees anticipated to be collected by Imperial County for these service, from the Russell Court Subdivision are estimated at **$442,090** as noted in the following Table:

Table PS-1
County Development Impact fees

County Impact Fees	131 Single Family Units	66 Multi Family Units
General Services ($1,349/$1,057)	$ 176,719	$ 69,762
Park Services ($452/$354)	$ 59,212	$ 23,364
Sherriff Services ($619/$484)	$ 81,089	$ 31,944
Total:	$ 317,020	$ 125,070

Source: Imperial County Ordinance 1418 Enacting Development Impact Fees

Public Services Significance Criteria

Per State CEQA Guidelines, the proposed project would have an effect and would result in significant impacts to public services if it will:

- Results in a substantial adverse physical impact associated with the provision or need for new or physically altered law enforcement and or emergency facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios;
- Results in a substantial adverse physical impact associated with the provision or need for new or physically altered fire protection enforcement facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios;
- Results in a substantial adverse physical impact associated with the provision or need for new or physically altered educational facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios;
- Results in a substantial adverse physical impact associated with the provision or need for new or physically altered parkland and or recreational facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service rations.

Public Services Impact Analysis

The proposed subdivision will result in an increase demand to all public services. Impacted services include law enforcement, fire protection, schools, parks, and other government facilities and/or services. However, the demand will not result in the need for new facilities at a level that would cause adverse environmental effects. Most of the service demand generated by the proposed Russell Court development will be offset via the collection of Development Impact Fees by the City, School Impact Fees by the School District and Imperial County Development Impact Fees. Each service demand that was previously noted as deficient or under expansion is noted below with the direct impact analysis that would result from the proposed Russell Court Subdivision.

Administrative Facilities & Services Impacts–Although administration facilities are at a deficit of 4,689 SF within the City of Imperial, plans are already in progress for expansion. The planned construction of the new administrative facilities is not expected to result in any adverse environmental impacts. The project developer is responsible to pay an estimated $50,000 in Administration Impact Fees to cover a fair share of the demand. This sum calculated by multiplying the $253.91 development impact fee per dwelling unit by 197 Units. There is no difference of impact fee for Single Family Units versus Multi-Family Units.

Fire Facilities Impacts– Currently the fire facilities have adequate response times that meet city needs. Per the Service Area Plan, adopted in 2015, the City is estimated to reach a population of 62,541 by the year 2035, and another fire station will be needed at that time. A master plan for fire protection facilities has not been prepared by the fire department and future needs. A shared fire/police Public Safety Building of approximately 15,000 square feet is proposed to be shared by the fire and police departments. The Russell Court subdivision is responsible to pay an estimated $22,900 in Fire Impact Fees to cover a fair share of the demand. These fees were calculated by multiplying the $116.32 development impact fee by 197 dwelling units, as there is no difference in impact fees between Single Family Units and Multi-Family Units for fire facilities.

Police Protection & Law Enforcement Facilities Impacts– As previously noted, the City was operating at a deficit of -2,611 SF in building space and -10 Officers, -4 Vehicles, and -3 Volunteers in 2015. The aforementioned Public Safety Building would satisfy a portion of this demand, the construction of which is not expected to result in any significant environmental impacts. Based on the current police protection standard of 1.6 officer per 1000 people, and two officers per vehicle the Russell Court Subdivision would generate a demand of +1.05 Officers, +.52 vehicles which will be offset by the respective Police Impact Fees. This is based off of an anticipated population increase of 660. The Russell Court subdivision is anticipated to pay an estimated $47,700 in Police Impact Fees to cover a fair share of the demand. This amount was calculated by multiplying the $242.15

development impact fee by 197 dwelling units as there is no difference of impact fee for Single Family Units versus Multi-Family Units.

Library Facility Impacts- The library is currently under a 3,474 SF expansion and upon completion would be able to adequately serve the current and growth population through 2025. The Russell Court development is responsible to pay an estimated $50,000 in Library Impact Fees to cover a fair share of the demand. This figure is based on $263.52 impact fee multiplied by 131 single family units, and adding $245.14 impact fee multiplied by 66 multi-family units.

Park and Recreation Facilities Impact-As previously noted, the City of Imperial had adopted a performance standard of 3 acres per 1,000 in population. The Russell Court Subdivision will generate a demand of 1.97 acres based on the anticipated population of 660. The proposed stormwater retention basin will serve the dual use as park space/retention. Additionally, the Russell Court development is responsible to pay an estimated $296,400 in Park Impact Fees to cover their fair share of the demand on existing parks. The developer will be required to design the retention basin in a manner that can accommodate park amenities and green space.

Circulation Facilities Impacts- Circulation Facilities that are directly impacted are examined under the MND section titled Transportation/Traffic under which affected roadways will be improved by the developer. The Russell Court development is further responsible to pay an estimated $91,000 in Circulation Facility Impact Fees to cover their fair share of the demand/impacts caused to other local roadways. This figure is calculated by multiplying the $514.76 impact fee by 131 single family units and adding the $357.69 impact fee multiplied by 66 multi-family units.

Schools & Educational Service Impacts- The subject project site lies within the Imperial Unified School District. The two elementary schools TL Waggoner Elementary and Ben Hulse Elementary, one middle school (Frank Wright Middle School) and one high school (Imperial High School) are in need of expansion and/or modernization. The Russell Court Subdivision will generate a demand for 129 new students based on 197 proposed units and a student generation standard of .655 per residential unit (*Imperial Unified School District School Facility Needs Analysis March 2015*). It is anticipated that the established School Impact Fees will offset the service demand. The Russell Court development is responsible to pay an estimated $1 Million in Level II development fee's to the Imperial Unified School District. This amount is based on the Districts impact fee requirement of $4.05 per square foot of residential development.

Public Services Conclusion

The proposed Russell Court Subdivision will result in an increase demand to all public services. However, the demand will not result in the need for new facilities at a level that would cause adverse environmental effects given that the City and the School District have either secured or examined suitable sites for the needed expansions. It is anticipated that the service demand generated by the Russell Court Subdivision development and annexation will be offset via the collection of Development Impact Fees by the City of Imperial, the Imperial Unified School District, and the County of Imperial. Additionally the project will need to develop improvement plans that can accommodate on on-site park/basin facility.

Public Services Impacts & Mitigation Measures

As previously noted the anticipated impacts to public services are anticipated to be less than significant and offset by development impact fees. New facility demand anticipated to be directly addressed by the project is park land via the following mitigation measure:

Impact PS-1- The proposed development will result in a demand of 1.97 acres of park space based on a population increase of 660 persons and an adopted ratio of three acres per 1,000 in population.

Mitigation PS-1-The proposed on-site retention basin shall be designed for dual use as Open Space/Recreation and shall incorporate shade trees and landscape areas. The basin area shall be able to support shade trees and limited landscaping in support of water conservation efforts. A landscaping plans shall be submitted for review and approval by the City Public Works Department.

3.1.10 Transportation/Traffic

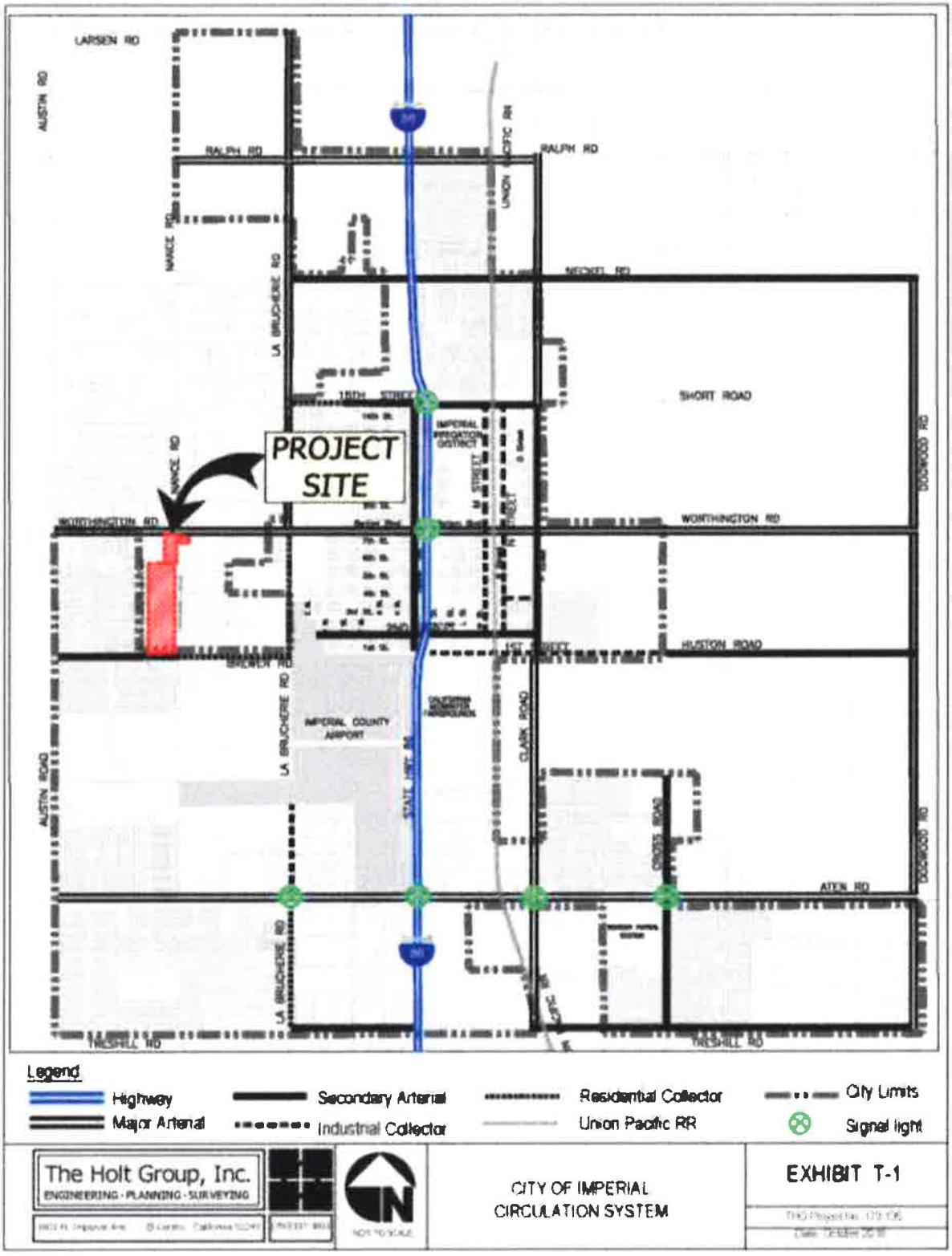
Transportation facilities consist primarily of roadways and traffic lights, and may also include pedestrian facilities such as sidewalks, bus stops and other transit operations. This section of the MND proposes to assess circulation and traffic impacts associated with the proposed Russell Court Subdivision improvements at a localized point and to the immediately surrounding areas. The demand on the existing transportation facilities is also evaluated in this section. There were two traffic studies conducted for the proposed Russell Court Subdivision prepared by The Perfect Solution in November 2015 and April 2016 (**Please See Appendix I-Traffic Studies**). One for **Area 1: 125 R-1 Single Family Dwelling Units**, and one for **Area 3: 66 R-A Apartment Units**. The Area 1 traffic study only accounted for 125 units and did not take into account the single dwelling unit proposed in Area 2, nor a dwelling unit adjustment of five more units. The assessment was adjusted to 131 dwelling units. This adjustment was made throughout for all of the traffic study findings. During the course of completing the traffic analysis, the number of units was again reduced, however, the assessment continues to be based on the worst case scenario of 131 dwelling units.

Transportation and Traffic Setting & Existing Conditions

The City of Imperial, in general, is located on the south central portion of Imperial County, within the County of Imperial, California approximately 90 miles east of downtown San Diego. State Route 86 traverses the City on a north/south orientation and connects 10 miles north to the City of Brawley and about 2 miles south of the City of El Centro. The Russell Court Subdivision development is proposed to be located in the mid-west portion of the City of Imperial. The property lies on the southwest corner of the intersection of Nance Road and Worthington Road, with proposed frontage along both streets.

The City of Imperial maintains over 71.2 miles (Source: 2015 ICTC records) of roadways and strives to maintain a level of service above a "C" Service level which at minimum operates with average delays occurring but having stable operation. This means that the volume to capacity ratio of the roadways is 0.70 to 0.79 and the stop delays range between 15.1 seconds to 25.0 seconds as provided in more detailing in the preceding sections. This section proposed to identify the existing conditions of the roadways and intersections within the vicinity of the project to determine travel flow and/or delay difficulties, if any, that exist prior to adding the traffic generated by the proposed project. Roadways considered under the traffic assessment include State Route 86, Worthington Road, Austin Road, Nance Road, and Brewer Road as noted in **Exhibit T-1-City of Imperial Circulation System** and further described in the following narratives.

Exhibit T-1-City of Imperial Circulation System



State Route 86: State Route 86 is classified as a Freeway over the portion running through the City of Imperial. It consists of four through lanes, exclusive left turn lanes at all intersections with some exclusive right turn lanes. It has a posted 55 mph speed limit from Treshill Road to 2nd Street, 50 mph from 2nd Street to 15th Street and 65 mph from 15th Street to the City of Brawley. On-street parking is prohibited on SR 86 and sidewalks are not provided. SR 86 has an estimated capacity of 40,000 vehicles per day over the portion running through the City of Imperial, at Level of Service (LOS) "E" which represents conditions at or near capacity for SR 86. Individual vehicles within this segment may have little free room to maneuver with the traffic stream and any minor disruptions can cause a breakdown in the flow of traffic.

Worthington Road/Barioni Boulevard: Worthington Road is directly north of the project site. Worthington Road is classified as a Major Arterial which runs east/west through the City of Imperial, and carries the name Barioni Boulevard in the downtown area between "B" Street and "P" Street. The intersection with State Route 86 is signalized with protected left turns on SR-86 and Split phase signal timing on the minor approaches. Worthington Road has an estimated capacity of 40,000 vehicles per day, and similarly to SR 86, operates at a Level of Service (LOS) "E", at four-lane sections. The existing two-lane sections, such as area abutting the project site, have an estimated capacity of 20,000 vehicles per day. The posted speed limit is 25 mph from "P" Street to "B" Street, 35 mph from "B" Street to Nance Road, and 45 mph from Nance Road to Austin Road. Bike lanes are not provided. Parking is permitted at various locations, along existing improved portions with concrete curbs.

The Worthington/ Barioni corridor is in transition as the City grows outward. As arterial intersections develop from side street stop controls, to all-way stop controls, and then eventually to signalization. Regional funding for those improvements needs to be established.

Austin Road: Austin Road runs north/south approximately .50 miles to the west of the project site, and is classified as a Secondary Arterial. The posted speed limit is 55 mph. Bike lanes are not provided and on-street parking is prohibited. The two-lane sections of Austin Road, on both sides of Worthington Road, have an estimated capacity of 20,000 vehicles per day, per City of Imperial staff. The level of service has not been established, however, traffic represents a stable flow.

Nance Road: Nance Road runs north/south directly to the east of the project site, and is classified as Major Collector. There is no posted speed limit and may meet the requirements of a residential zone with a 25 mph speed limit at buildout. Bike lanes are not provided and on-street parking is prohibited along the west side of Nance Road south of Worthington Road. This two-lane section of Nance Road has an estimated capacity of 16,200 vehicles per day (per County of Imperial Circulation Element) with 7,100 at level of service "C," again representing a stable flow of traffic with the selection of the speeds of individual drivers significantly affected by other drivers.

Brewer Road: Brewer Road runs east/west adjacent to the southern project boundary and is classified as a Major Collector. There are no posted speed limits and meets the requirements of a residential zone with a 25 mph speed limit. A Class II – Bike Lane is provided on the north side for westbound cyclists. Parking is provided along the south side of the street for eastbound traffic. This two-lane section of Brewer Road has an estimated capacity of 16,200 vehicles per day (per County of Imperial Circulation Element) with 7,100 at level of service "C" as noted for Nance Road.

Roadway segment Level of Service (LOS) standards and thresholds to determine roadway segment performance for this project are consistent with standards used by the City of Imperial, the County of Imperial and Caltrans. The analysis of roadway segment Level of Service is based on the functional classification of the roadway, the maximum capacity, roadway geometric, and existing or forecast Average Daily Traffic (ADT) volumes. **Table T-1 Roadway Capacity Standards** presents the roadway segment capacity and Level of Service standards utilized to analyze the project roadways.

Table T-1
Roadway Capacity Standards

Functional Classification	No. of Lanes	Level of Service				
		A	B	C	D	E
Freeway* – State Route 86	4	< 30,000	< 42,000	< 60,000	< 70,000	< 80,000
Major Arterial** – Worthington Rd./ Barioni Blvd.	4	< 15,000	< 21,000	< 30,000	< 35,000	< 40,000
Major Arterial*** – Worthington Rd./ Barioni Blvd.	2	< 7,500	< 10,500	< 15,000	< 17,500	< 20,000
Secondary Arterial*** – Austin Road	2	< 7,500	< 10,500	< 15,000	< 17,500	< 20,000
Major Collector**** – Nance Road/Brewer Road	2	<1,900	<4,100	<7,100	<10,900	<16,200

Source: The Perfect Solution

* The capacity of the Freeway segment crossing Barioni Boulevard comes from the Imperial County Standard Street Classification Table.

** The City of San Diego capacity ranges per LOS category, with 40,000 ADT Capacity.

*** Interpolated the capacities based on half its 4-lane counterpart.

**** Utilized the County Roadway Segment LOS thresholds.

The actual capacity of a roadway facility varies according to its physical attributes. Typically, the specific performance and Level of Service of a roadway segment is heavily influenced by local conditions such as adjacent parking, mid-block driveways and lane widths. Since none of the existing roadway segments considered for assessment are fully constructed to their ultimate width and lane configurations, The Perfect Solution used the County's two-lane Major Collector capacity for the existing conditions analysis. It was determined that all roadway segments fell within the LOS A to C range as noted in the preceding **Table T-2 – Existing Roadway Segment Levels of Service**.

Table T-2
Existing Roadway Segment Levels of Service

ROADWAY SEGMENT/CLASSIFICATION	ADT	LOS	Volume/CAPACITY
Worthington Road - Major Arterial between Nance Road and "B" Street	5,745	C	.35
Nance Road - Major Collector between Worthington Road and Banta Road	1,680	A	.10
Brewer Road - Major Collector between Russell Road and Austin Road	1,810	A	.11
Austin Road - Secondary Arterial south of Brewer Road	5,924	C	.37

Source: The Perfect Solution, November 2015, April 2016

Intersection levels of service are evaluated based on time delay. **Table T-3 Level of Service Description at Intersections** provides an overview of the average delay used as a standard.

Table T-3
Level of Service Description at Intersections

Average Total Delay Signal Intersections (Sec/Veh)	Average Total Delay Stop Intersections (Sec/Veh)	Level of Service	Expected Delay to Minor Street Traffic
≤ 10	≤ 10	A	Little or no delay
> 10.1 and ≤ 20	> 10 and ≤ 15	B	Short traffic delays
> 20.1 and ≤ 35	> 15 and ≤ 25	C	Average traffic delays
> 35.1 and ≤ 55	> 25 and ≤ 35	D	Long traffic delay
> 55.1 and ≤ 80	> 35 and ≤ 50	E	Very long traffic delays
< 80	< 50	F	

There are six existing intersections within the project vicinity that warranted consideration: 1. Barioni Boulevard at State Route 86; 2. Worthington Road at "B" Street; 3. Worthington Road at Nance Road; 4. Worthington Road at Austin Road; 5. Austin Road at Brewer Road; 6. Nance Road at Banta Road. Three of these intersections were operated below a level of service "C." **Table T-4 - Existing Intersection Levels of Service** depict the level of delay during AM and PM operations that correspond to the identified service levels.

Table T-4
Existing Intersection Levels of Service

STUDY INTERSECTION	EXISTING CONDITIONS			
	AM		PM	
	LOS	DELAY	LOS	DELAY
Barioni Boulevard at State Route 86	D	54.8 sec	C	24.8 sec
Worthington Road at "B" Street	D	34.9 sec	A	9.4 sec
Worthington Road at Nance Road	C	20.5 sec	A	4.1 sec
Worthington Road at Austin Road	E	35.5 sec	A	8.9 sec
Austin Road at Brewer Road	A	0.8 sec	A	0.5 sec
Nance Road at Banta Road	A	3.1 sec	A	2.7 sec

Source: The Perfect Solution, November 2015, April 2016

Traffic volumes at the intersection of Worthington Road and Austin Road, during the AM Peak hour identified a need for a separate northbound right turn lane and a separate westbound left turn lane to mitigate existing unacceptable service levels E. This existing condition is not the responsibility of the proposed project. Any addition of traffic that increases congestion of 2 seconds or more would result in a significant impact.

Transportation and Traffic Significance Criteria

For this analysis, impacts to transportation and circulation resulting from the proposed project would be considered potentially significant if the project:

- Causes an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the current street system or causes congestion at intersections;
- Exceeds, either individually or cumulatively, the level of service standard established by the City of Imperial;
- Results in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increases hazards due to a design feature, inadequate circulation and or emergency access, dangerous intersections or incompatible uses;
- Conflicts with adopted policies, plans, programs, supporting alternative transportation including bicycle routes, bus routes etc.

Transportation and Traffic Impact Analysis

Based on the City of Imperial's Circulation Element, Policy 1A, "No land use should be approved that will increase the traffic on a planned or existing City street above the street's existing design capacity at service level "C" without adequate mitigation being provided such as additional traffic lanes or signalization." If the pre-project LOS is A, B, or C, and the project increases a roadway segment volume to capacity ratios of .02 or more (measured in seconds per vehicle) or increases the delay in an intersection by 2 seconds or more, thus resulting in operation of LOS D, E, or F, then the project is considered to have a direct impact. If the pre-project conditions are already at a LOS of D, E, or F and the project increases the road segments or intersections by these same ratios, then the project is considered to have a cumulative impact. Traffic related impacts are discussed as Construction Related Impacts, Operational Project Impacts, and Cumulative Impacts.

Construction Related Impacts

Many of the existing roadway segments and intersection conditions, as previously noted, are operating at or below the acceptable standards. Thus it is anticipated that the increase in traffic levels during construction activities will result in short-term impacts on traffic and circulation. Off-site improvements related to this project will also result in temporary road closures and/or detours. Short term traffic related impacts would be minimized by the use of standard engineering and traffic management practices. Encroachment Permits would be required through Imperial County, Imperial Irrigation District and the City of Imperial to perform the associated work. A Traffic Plan will also need to be developed and reviewed by the corresponding agencies to reduce any potentially significant impacts.

Operational Project Related Impacts

There will be two paved access points to Project Area 1 the Single Family Residential Subdivision serving 130 units or less; one along Brewer Road at the south end and one along Nance Road on the east side. The proposed site access from Nance Road will require crossing over the Imperial Irrigation District Newside Canal. All other streets within Area 1 are proposed to be residential cul-de-sacs. Lots will be fenced or walled restricting vehicle access through the end of the cul-de-sac. The proposed north/south collector street originating at Brewer Road will provide easy access to each short cul-de-sac that branches off on each side, throughout the project. Midway through the site one of the branches to the east will not be a culde-sac but will connect to Nance Road, for project trip circulation. Neither Nance Road nor Brewer Road have vertical or horizontal curves allowing for good visibility at both project access point where sight distances can be maximized by prohibiting obstructive landscaping or signs within the intersection sight triangles.

There will be one single access point to Project Area 3 the 66 unit apartment complex, along Worthington Road. This access point connects directly to existing paved, Worthington Road. The internal circulation system in Area 3 will also provide access to all on-site parking for each of the apartment units and the leasing office. Worthington Road is also free of any

vertical or horizontal curves allowing for good visibility at the proposed project access point where sight distances can be maximize by prohibiting obstructive landscaping or signs within the intersection sight triangles. The single family home would also be directly accessed from Worthington Road.

The daily trip generation and design hour volumes shown in **Table T-5 Project Trip Generation** were calculated by The Perfect Solution using the Institute of Transportation Engineers (ITE) Trip Generation Report – 8th Edition. Average rates and directional splits for Single-Family Detached Housing was used for this analysis. The number of dwelling units was used as the independent variable, for both *Weekly* and *Peak Hour Trip Rates*. See **Appendix I -Traffic Study** for a more detailed report. Driveway Trips were not adjusted for Pass-By or Diverted Trips.

Table T-5
Project Trip Generation

DAILY TRIP GENERATION										
Land Use	Daily	AM Peak Hour			PM Peak Hour			% Pass-By Diverted Trips		
		Percent of Daily	% In	% Out	Percent of Daily	% In	% Out	Daily	AM	PM
Single-Family Detached Housing	9.57 trips per Dwelling	7.8%	25%	75%	10.6%	63%	37%	0%	0%	0%
Multi-Family Attached	6.65 trips per Dwelling	7.7%	20%	80%	9.3%	65%	35%	0%	0%	0%

DRIVEWAY TRIPS								
Land Use	# Units	Daily	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Single-Family Detached Housing	125 Dwelling Unit +6	1,254	98	25	73	133	84	49
Multi-Family Attached	66 Dwelling Unit	439	34	7	27	41	27	14
Total Driveway Trip Increase		1693	132	32	100	174	111	63
Pass-By (reduction) Trips		0	0	0	0	0	0	0
Cumulative Trips		1693	132	32	100	174	111	63

NOTE: Trip generation rates are based on the TRC use of INSTITUE OF TRAINSPORTATION ENGINEER (ITE) adjusted for the number of dwelling units for this specific project- Trip Generation An ITE Informational Report - 8th Edition (ITE Catagory 210). Driveway Trips reflect the total project traffic. Cumulative Trips reflect trip generation after pass-by traffic is subtracted from Driveway Trips.

The total trip generated was estimated at 1,254 from 131 from single family dwelling units and 439 from the sixty six multi-family dwelling units. Trip distribution and assignment was assumed to reflect the existing traffic patterns for the City of Imperial and the broader area in general. **Table T-6 Project Trip Distribution** represents the estimated traveled directions for traffic accessing the proposed project site at the anticipated distribution levels.

Table T-6

Project Trip Distribution

Direction	Roadways	Trip Percentages
East	Barioni Boulevard	10%
West	Worthington Road	2%
North	State Route 86	35%
South	State Route 86	40%
North	Austin Road	5%
South	Austin Road	8%

Source: The Perfect Solution, 2016

As noted in the Trip Distribution Table, the majority of the trips will head north and south towards State Route 86. The following is the result of the trip distribution level impacts to affected road segments and intersections.

Roadway Segment Impacts–For the purposes of this traffic analysis, the roadway geometries at the project opening day were assumed to be the same as the existing conditions. The Project ADT numbers were specifically adjusted for this project with 131 dwelling units for Area 1 and Area 2 as well as the 66 dwelling units for Area 3. The Level of service shown in **Table T-7 Existing Plus Project Roadway Segment** reflects the higher volumes while maintaining acceptable service levels from the existing conditions.

Table T-7
Existing Plus Project Roadway Segment

Roadway Segment – Classification	ADT	Project ADT	Final ADT	Final LOS	Volume/Capacity (Change in V/C)
Worthington Road – Major Arterial between Nance Road and "B" Street	5,745	1,436	**7,181**	**D**	**0.44 (0.09)**
Nance Road – Major Collector between Worthington Road and Banta Road	1,680	1,172	**2,852**	**B**	**0.18 (0.08)**
Brewer Road – Major Collector between Russell Road and Austin Road	1,810	78	**1,888**	**A**	**0.12 (0.01)**
Austin Road – Secondary Arterial south of Brewer Road	5,924	132	**6,056**	**C**	**0.37 (0.00)**

Source: The Perfect Solution, 2016

Intersection Impacts- The Levels-of-Services shown in **Table T-8 Existing Plus Project Intersection Levels of Service** reflects the impacts of project generated trips upon existing traffic volumes and shows an increase in intersection approach delays which are approaching unacceptable levels.

Table T-8
Existing Plus Project Intersection Levels of Service

STUDY INTERSECTION	EXISTING PLUS PROJECT			
	AM		PM	
	LOS	DELAY (Net Change)	LOS	DELAY (Net Change)
Barioni Blvd at State Route 86	E	57.7 sec. (2.9 sec. increase)	C	28 sec. (3.2 sec. increase)
Worthington Rd. at "B" St.	F	65.3 sec. (30.4 sec. increase)	B	10.8 sec. (1.4 sec. increase)
Worthington Rd. at Nance Rd	F	58.3 sec. (37.8 sec. increase)	A	5.5 sec. (1.4 sec. increase)
Worthington Rd at Austin Rd.	E	40.1 sec. (4.6 sec. increase)	A	9.0 sec. (0.1 sec. increase)
Austin Rd. at Brewer Rd.	A	0.9 sec. (0.1 sec. increase)	A	0.5 sec. (0.0 sec. increase)
Nance Rd. at Banta Rd.	A	5.3 sec. (2.2 sec. increase)	A	3.2 sec. (0.5 sec. increase)
Russel Rd at Brewer Rd	A	0.5 sec. (0.0 sec increase)	A	0.9 sec. (0.0 increase)

Source: The Perfect Solution, 2016

Recommendations have been made at all four failing intersections with a level of Service E or F. It is recommended by The Perfect Solution that the stop controls to Barioni Boulevard at "B" Street be removed; that a stop control be added to "B" Street to improve Worthington Road at Nance Road; and that an addition of a 100' northbound right turn lane and a 200' left turn lane be added to Worthington Road at Austin Road. It was also recommended that the split phase timing configuration at Barioni Boulevard and SR 86 be eliminated to further improve efficiency to levels at, or better than, existing conditions.

The sections of Worthington Road, Brewer Road, and Nance Road abutting the project site are not improved to design capacity. Worthington Road and Brewer Road directly abutting the proposed development along City right-of-way will need to be improved to half width and per the City's adopted standards. Nance Road has a paved width of 32 feet ± which is not within the adopted standards of the 40 feet pavement width required for a major collector roadway. Nance road, however, is separated by the IID Newside Canal and restricted for

improvement to full width. Nance Road will be required to be improved to full width standards along all sections along the Newside Canal requiring pipelining only.

Cumulative Project Impacts

In order to best represent cumulative impacts expected for the traffic study areas, The Perfect Solution performed a separate study for each respective area and contacted the City of Imperial for recently approved projects to consider under cumulative impacts. Since a list of recently approved projects in the vicinity of our project was not available, The Perfect Solution applied an annual growth factor that multiplied the existing traffic volumes by 1.5% per year for two years to estimate the near term traffic volumes when the proposed project is fully occupied. The two following tables, demonstrate the combined results for the estimated annual growth factors plus the project projections which have been previously determined. The findings are as follows for roadway segments and for Intersections:

Roadway Segment Impacts– The Levels of Services shown in **Table T-9 Cumulative Plus Project Roadway Segments** – Levels of Service reflect acceptable service levels for existing plus cumulative conditions. No additional mitigation measures are warranted.

Table T-9
Cumulative Plus Project Roadway Segments

Roadway Segment – Classification	ADT	LOS	Volume/ Capacity (Change in V/C)
Worthington Road – Major Arterial between Nance Road and "B" Street	7,355	D	0.45 (.10 sec. increase)
Nance Road – Major Collector between Worthington Road and Banta Road	2,902	B	0.18 (.08 sec increase)
Brewer Road – Major Collector between Russell Road and Austin Road	1,943	B	0.12 (0.01 sec. increase)
Austin Road – Secondary Arterial south of Brewer Road	6,235	C	0.38 (0.01 sec. increase)

Source: The Perfect Solution, November 2015, April 2016

Intersection Impacts–The Levels of Services shown in **Table T-10 Cumulative Plus Intersection Levels of Service** reflect the impacts of future generated project trips on the traffic volumes estimated for opening day and show a significant increase in approach delays. These levels are both for all project areas. See **Appendix I-Traffic Studies** for more detailed reports.

Table T-10
Cumulative Plus Project Intersection Levels of Service

STUDY INTERSECTION	CUMULATIVE			
	AM		PM	
	LOS	DELAY	LOS	DELAY
Barioni Boulevard at SR 86	D	62.8 sec. (8.0 sec. increase)	C	28.6 sec. (3.8 sec. increase)
Worthington Road at "B" Street	E	66.2 sec. (31.3 sec. increase)	A	10.9 (1.5 sec. increase)
Worthington Road at Nance Road	D	64.7 sec. (44.2 sec. increase)	A	5.5 sec. (1.4 sec. increase)
Worthington Road at Austin Road	E	39.9 sec. (4.4 sec. increase)	A	8.9 sec. (0.0 sec. increase)
Austin Road at Brewer Road	A	0.8 sec. (0.0 sec. increase)	A	0.5 sec. (0.0 sec. increase)
Nance Road at Banta Road	A	8.4 sec. (5.3 sec. increase)	A	3.2 sec. (0.5 sec. increase)
Russel Road at Brewer Road	A	0.5 sec. (0.0 sec. increase)	A	0.9 sec. (0.0 sec. increase)

Source: The Perfect Solution, November 2015, April 2016

As previously noted, the traffic volumes at the intersection of Worthington Road and Austin Road, during the AM Peak hour identified a need for a separate northbound right turn lane and a separate westbound left turn lane to mitigate existing unacceptable service levels E. With the addition of two extra lanes approaching the intersection the AM Peak service level would improve to 22 seconds in delay to an LOS of "D".

Recommendations in the traffic study included changes at all four failing intersections. The four intersections: Barioni Boulevard and SR 86, Barioni Boulevard at "B" Street, Worthington Road at Nance Road and Worthington Road at Austin Road via a combination of modification to controls and addition of north bound right turn land and westbound left turn late at the Worthington and Austin Road intersection. It was also recommended that elimination of the split phase timing configuration at Barioni Boulevard and SR 86 would further improve efficiency to the levels noted in **Table T-11 Mitigated Intersection Levels of Service**. The service levels for cumulative plus project conditions would be reduced to levels better than pre-existing conditions or at acceptable "C" or better levels.

Table T-11

Mitigated Intersection Levels of Service

STUDY INTERSECTION	EXISTING PLUS PROJECT MITIGATED			
	AM		PM	
	LOS	DELAY (Net Change)	LOS	DELAY (Net Change)
Barioni Blvd at State Route 86	D	**46.1 sec.** (14.9 sec. decrease)	B	**14.1 sec.** (14.1 sec. decrease)
Worthington Rd. at "B" St.	C	**23.1 sec.** (41.8 sec. decrease)	A	**1.6 sec.** (9.1 sec. decrease)
Worthington Rd. at Nance Rd	D	**28.1 sec.** (38.1 sec. decrease)	A	**9.4 sec.** (1.3 sec. increase)
Worthington Rd at Austin Rd.	D	**25.7 sec.** (19.6 sec. decrease)	A	**8.8 sec.** (.2 sec. decrease)

Source: The Perfect Solution, 2016

Transportation and Traffic Conclusion

Temporary Traffic related impacts are anticipated for the project during construction activities. Any construction or operation on IID property, Imperial County roadways and existing City roadways will necessitate an encroachment permit and implementation of an approved traffic plan. The current conditions at the evaluated intersections noted existing failing conditions that would thus be augmented once the proposed project is operational. A number of roadway improvements at key intersections are required to be incorporated into the project to improve levels beyond existing conditions.

Transportation and Traffic Impacts & Mitigation Measures:

Both traffic studies concluded that the 1,693 vehicle trips anticipated to be generated by the project would be significant impacts to the current failing conditions. The following Impacts and Mitigation Measures have been identified for circulation and traffic.

Impact T-1 Due to the existing failing conditions of four intersections any additional traffic during construction activities will result in temporary, yet potentially significant impacts, particularly during peak hours to existing County and City roadways.

Mitigation Measure T-1 It shall be necessary for the developer to prepare a traffic control plan prior to initiating any grading and/or construction activities and obtain encroachment permits from the corresponding agency. The traffic control plan shall be reviewed and approved by the City of Imperial and the County of Imperial Department of Public Works.

Impact T-2 Based on the traffic generated traffic volumes it was calculated that the Barioni/Worthington corridor would significantly impact circulation at four failing intersections.

Mitigation Measure T-2 To improve operations along the Worthington/Barioni corridor the following mitigation measures shall be incorporated:

1. Barioni Boulevard at State Route 86-Change the phasing to eliminate the split phase timing configuration to Barioni Blvd at State Route 86.
2. Barioni Boulevard at "B" Street-Remove stop controls on Barioni Blvd at "B" Street.
3. Worthington Road at Nance Road- Add stop controls on Worthington Road at Nance Road.
4. Worthington Road at Austin Road-Add a 100' northbound right turn lane and a 200' westbound left turn on Worthington Road at Austin Road.

Impact T-3 The proposed site access from Nance Road encroaches into Imperial Irrigation District right-of-way/easements.

Mitigation Measure T-3 Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to: surface improvements such as proposed new streets, driveways, and parking lots shall require an Encroachment Permit the IID. When additional crossings or modification to the existing ones are needed, the developer will be responsible for the cost of these improvements and IID will design and construct them. An IID planning review will be required for the project in accordance with Water Department developer guidelines. IID's Developer Project Guide is available at the website: https://www.iid.com/home/showdocument?id=2328.

Impact T-4 Worthington Road, Brewer Road, and Nance Road abutting the project site are not improved to design capacity.

Mitigation Measure T-4 Worthington Road and Brewer Road along the project site shall be improved to half width and per the City of Imperial's adopted standards per their assigned roadway classification. Nance Road will be required to be improved to full width standards along the Newside Canal crossing requiring pipelining by IID and intersection with Banta Road only.

SECTION 4.0 – Mandatory Findings of Significance

Implementation of the proposed project is not anticipated to have any additional effects on the environment that have not been examined in this Mitigated Negative Declaration. The proposed project, in conjunction with prospective surrounding developments, may have the potential to cumulatively impact traffic in the local and regional circulation system. However, the project as revised now avoids or mitigates the potentially significant environmental impacts. The project as proposed would not result in any significant impacts and any potential impacts would be reduced to a level below significance.

I, therefore, find that the proposed project will not have a significant effect on the environment, with the implementation of the identified mitigation measures. A MITIGATED NEGATIVE DECLARATION will be prepared.

Jorge Galvan, AICP
City Planner

December 13, 2016

Signature

Date

SECTION 5.0 – Mitigation Monitoring Program

This Mitigation, Monitoring and Reporting Program was prepared in accordance with Section 21081.6 of the Public Resources Code which requires that a Lead Agency, which approves or carries out a project where an EIR or mitigated Negative Declaration has been adopted, prepare a monitoring program to ensure that the mitigation measures are used as in order intended to avoid significant effects to the environment.

The City of Imperial, as the Lead Agency has the responsibility to ensure implementation of the mitigation measures included with the monitoring program until such time that the monitoring responsibilities are delegated to other public agencies. Should this occur and some or all of the monitoring is passed to other public agencies, presumably because of an expertise in the subject, each agency will have the discretion to choose its own approach to monitoring and reporting.

The Mitigation, Monitoring and Reporting Program consists of the following components:

- A summary of the mitigation measures listed in the Mitigated Negative Declaration
- Identification of the Implementing party
- Identification of the Monitoring agency
- Timing of the mitigation measure

The City shall assign a staff member to coordinate all mitigation monitoring, check that measures are implemented as stated in the Mitigated Negative Declaration, and ensure timely reporting if monitoring is done by responsible agencies. Implementing agencies, responsible agencies, and/or the construction manager for the project will make a written report to the City Manager when a mitigation measure has been completed. If City staff determines that mitigation measures are not in compliance, notice shall be given, and upon expiration of the specified time period; construction shall be halted and fines imposed at the discretion of the City.

The City of Imperial has summarized the various requirements to be imposed on the project that will reduce all potential environmental impacts to a less than significant level and are identified herein:

A. Monitoring Implementation

The following measures are recommended to mitigate direct and cumulative impacts to below a level of significance. The requirements listed below are the responsibility of City of Imperial and are to be imposed on the project.

AIR QUALITY

The following mitigation measures will be required to ensure air quality is not affected as a result of the project.

Impact AQ-1-Construction Impacts Imperial County is a non-attainment area for both particulate matter (PM10) and ozone. Construction by its very nature may produce a variety of emissions. Construction activities such as site preparation, grading, excavation and soil compaction, while temporary, may increase local emissions. Impacts to air quality from the construction of the proposed project may result in a net increase of PM10 and Ozone.

Mitigation Measure AQ-1 The project shall comply with ICAPCD's standard mitigation measures for construction combustion equipment and mandatory Rule VIII to ensure that adequate air quality is maintained.

Standard Mitigation Measures for Combustion Equipment

1. Use of alternative fueled or catalyst equipped diesel construction equipment, including all off-road and portable diesel powered equipment.
2. Minimize idling time either by shutting equipment when it is not in use or reducing the time of idling to 5 minutes as a maximum.
3. Limit, to the extent feasible, the hours of operation of heavy duty equipment and/or the amount of equipment in use.
4. Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).
5. To provide a greater degree of reduction of PM emissions and NOx from construction combustion equipment per Air Pollution Control District recommendations the project site will be subject to the following mitigation measures:
6. Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways.
7. Implement activity management (e.g. rescheduling activities to reduce short-term impacts).

Standard Mitigation Measures for Project Construction-ICAPCD Rule VIII

1. All disturbed areas, including Bulk Material Storage which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emissions by using, water, chemical stabilizers, dust suppressants, tarps or other suitable material such as vegetative ground cover.

2. All on site and off site unpaved roads will be effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.
3. All unpaved traffic areas one (1) acre or more with 75 or more average vehicle trips per day will be effectively stabilized and visible emission shall be limited to no greater than 20% opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.
4. The transport of Bulk Materials shall be completely covered unless six inches of freeboard space from the top of the container is maintained with no spillage and loss of Bulk Material. In addition, the cargo compartment of all Haul Truck is to be cleaned and/or washed at delivery site after removal of Bulk Material.
5. All Track-Out or Carry-out will be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.
6. Movement of Bulk Material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient water, chemical stabilizers or by sheltering or enclosing the operation and transfer line.
7. The construction of any new Unpaved Road is prohibited within any area with a population of 500 or more unless the road meets the definition of a Temporary Unpaved Road. Any temporary unpaved road shall be effectively stabilized and effectively stabilized and visible emissions shall be limited to no greater than 20% opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering.

Impact AQ-2 Operational Impacts An estimated 1,635 daily vehicular trips are anticipated from the project when operational which may marginally contribute to reduced air quality, greenhouse gas emissions and Global Climate Change.

Mitigation Measure AQ-2 The project shall incorporate the development of an Air Quality Response Plan to be adopted by the school district and implemented at the proposed elementary school. The plan shall stipulate actions and or procedures the school will take to ensure students are not exposed to excessive dust, odors, pesticides or smoke that may result from the normal agricultural operations in adjacent properties.

Implementing Party: Developer

Monitoring Agency: City of Imperial

Timing: Prior to Grading Activities and During Grading and Construction Activities

BIOLOGICAL RESOURCES

The following mitigation measures are needed to reduce the potential impacts to biological resources to a level below significance:

Impact BIO-1- An inactive burrow was found off site, and as a species special concern, mitigation in the form of avoidance and impact minimization is required.

Mitigation BIO-1- A pre-construction survey shall be performed no less than 14 days prior to initiating ground disturbances. Report should be submitted to the City of Imperial. Construction and earthmoving activities shall comply with the following:

Avoidance Measures

1. It is recommended that construction foremen and workers and onsite employees be given worker training by a qualified biologist regarding burrowing owl that includes: description of owl; biology; regulations; wallet card with picture/guidelines; notification procedures.

Minimization Efforts

2. If occupied burrows are found on site, they should not be disturbed during the nesting season, which occurs from February 1 to August 31 unless a qualified biologist, approved by CDFG verifies through non-invasive methods that either the birds have not begun egg-laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

3. If avoidance is possible, then no disturbance of occupied burrows should occur within 50 meters (approximately 160 feet) during the non-breeding season of September 1 through January 31 or within 75 meters (approximately 250 feet) during the breeding season of February 1 through August 31. Under the direction of a qualified biologist, sheltering in place, such as utilizing hay bales or fencing to shield owls from sounds and activities may be considered during non-breeding season, if it is necessary to construct closer than 160 feet. If possible, the foraging habitat should be permanently preserved contiguous with occupied burrow site for each pair of breeding burrowing owls or single unpaired resident bird.

Mitigation Measures

4. When destruction of occupied burrows is unavoidable, in order to offset the loss of foraging and burrow habitat, foraging habitat per pair or unpaired resident bird should be permanently protected in a location and configuration acceptable to CDFG.

5. In addition, when destruction of occupied burrows is unavoidable, new burrows should be created at a ratio of 2:1. After consultation with CDFW, artificial

burrows (minimum of 50 feet apart) will be installed using the guidelines found in the Imperial Irrigation District Artificial Burrow Installation Manual or other applicable manual.

6. If owls must be moved away from the disturbance area, passive relocation techniques should be used. Owls should be executed from burrows in the immediate impact zone and within a 50 meter (approximately 160 feet) buffer zone by installing one-way doors in burrow entrances. One-way doors should be left in place 48 hours to ensure owls have left the burrow before excavation. Excavation shall be done using hand tools and refilled to prevent reoccupation. After burrow is collapsed, contractor will immediately disk down area to prevent reoccupation.

7. Documentation is required. Photographs and notes shall be taken and a report shall be sent to CDFW.

Impact BIO-2 - If construction begins between February 1 through August 31, common breeding season form most migratory birds, a direct impact of destroying nests or disrupting nesting activities might occur.

Mitigation Measures BIO-2-Within three (3) to seven (7) days prior to commencement of grading/construction activities, a qualified biologist shall perform a preconstruction survey within 500 feet from the proposed work limits and the following measures shall be implemented as applicable:

1. If active avian nest(s) are discovered within or 500 feet from the work limits, a buffer shall be delineated around the active nest(s) measuring 300 feet for passerines and 500 feet for raptors. A qualified biologist shall monitor the nest(s) weekly after commencement of grading/construction to ensure that nesting behavior is not adversely affected by such activities.

2. If the qualified biologist determines that nesting behavior is adversely affected by grading/construction activities, then a noise mitigation program shall be implemented in consultation with CDFW, to allow such activities to proceed. Once the young have fledged and left the nest(s), then grading/construction activities may proceed within 300 feet (500 feet for raptor species) of the fledged nest(s).

3. Consultation with CDFW shall be required prior to the removal of any raptor nest(s) observed during the preconstruction clearance surveys. Raptor nests are protected under Section 3503.5 of the California Fish and Game Code which makes it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes; or to take, possess, or destroy the nests or eggs of any such birds.

Implementing Party: Developer

Monitoring Agency: City of Imperial

Timing: Prior to Grading Activities

CULTURAL RESOURCES

The following mitigation measures shall be implemented to reduce potential impacts to cultural resources to a level below significance.

Impact C-1 The proposed project site is has the potential of being considered to be cultural significant to the Viejas Band of Kumeyaay Indians.

Mitigation C-1 In order to preserve and protect any potentially significant cultural resources, the following Mitigation Measures shall be implemented:

1. Mr. Earnest Pingleton of The Viejas Band of Kumeyaay Indians will be contacted at least thirty days prior to construction and be afforded the opportunity to assign a Kumeyaay Cultural Monitor on-site during ground disturbance activities.
2. In the unlikely event unanticipated, buried prehistoric archaeological resources (lithic material, faunal, pottery, etc.) or historical archaeological resources (ceramics, building materials, glassware, etc.) be unearthed during construction or any ground disturbing activities within the project areas, additional resource treatments would become necessary. Once a potential resource has been identified, all work within 100 feet must be halted until the find can be assessed by a qualified archaeologist.
3. If human remains are encountered during the proposed work, no further excavation or disturbance may occur in the vicinity of the find or in any area which may also harbor similar remains until the County coroner has been contacted. If the coroner identifies the remains as Native American, the descendants will be notified by the Native American Heritage Commission.

Implementing Party: City of Imperial

Monitoring Agency: The Viejas Band of Kumeyaay Indians

Timing: Prior and During Construction Activities

GEOLOGY/SOILS

The Geotechnical Report has identified areas of concern under seismicity, liquefaction potential and soil conditions that may adversely impact foundations. These conditions require mitigation as follows:

Impact GS-1 The site is located in a seismically active are nearby seismic faults including the Imperial, Brawley, Superstition Hills faults and this is subject to strong round shaking.

Mitigation GS-1 Design of the Russell Court Subdivision shall comply with the latest edition of the California Building Code for Site Class D using the seismic coefficients given in Table 2 of the Geotechnical Report prepared by Landmark Consultants.

Impact GS-2 Groundwater depths in the proposed project area are anticipated to be fairly shallow. Additionally, the site may be composed of silty and sandy soils. These conditions could result in a risk of liquefaction during seismic events.

Mitigation Measure GS-2 The design of the Russell Court Subdivision shall consider the foundation of the structures as either of the following:

1) Foundations that use grade-beam footings to tie floor slabs and isolated columns to continuous footings (conventional or post-tensioned)
2) Structural flat-plate mats, either conventionally reinforced or tied with post tensioned tendons

Impact GS-3 The native soil has severe to very severe levels of chloride ion concentration (1,030 to >18,000 ppm). Chloride ions can cause corrosion of reinforcing steel, anchor bolts and other buried metallic conduits. Resistivity determinations on the soil indicated very severe potential for metal loss because of electrochemical corrosion processes.

Mitigation GS-3 Mitigation of the corrosion of steel can be achieved by using steel pipes coated with epoxy corrosion inhibitors, asphaltic and epoxy coatings, cathodic protection or by encapsulating the portion of the pipe lying above groundwater with a minimum of 5 inches of densely consolidated concrete. No metallic water pipes or conduits should be placed below foundations.

Implementing Party: Developer

Monitoring Agency: City of Imperial

Timing: Prior to Building Permit

HAZARD AND HAZARDOUS MATERIALS

The review of potential hazards to or resulting from the proposed project determined that residents of the Russell Court Subdivision could be exposed to limited risk associated with operations at the Imperial County Airport. The following Mitigation Measures are recommended for the potential impacts:

Impact HZ-1 - The project is located within the Imperial County Airport Land Use Compatibility Plans' Zone C which is a common traffic pattern with limited risk to residential land uses.

Mitigation HZ-1- An overflight easement for residential uses shall be recorded with all property deeds and fully disclosed at the time of sale regarding this limited risk from aircraft.

Impact HZ-2 - The two-story structures at the maximum height of thirty five feet are within proximity to a navigation facility in a manner that may impact the assurance of navigation

signal reception as concluded through the Federal Aviation Administration Obstruction Evaluation/Airport Airspace Analysis Online Criteria Tool.

Mitigation HZ-2- The developer shall file with the Federal Aviation Administration any proposed two story residential and/or apartment unit improvements at least 45 days prior to construction for a No Hazard to Air Navigation Finding. The results of the formal consultation shall be submitted to the City of Imperial Building Official along with a building permit application.

Impact HZ-3- There are no known gas, oil, or geothermal wells in the area, but wells may be discovered during the development process.

Mitigation HZ-3 The Department of Conservation Division of Oil, Gas, and Geothermal Resources- District 1 office will be contacted immediately if and wells, including plugged, abandoned, or unrecorded are damaged or uncovered during excavation.

Implementing Party: Developer

Monitoring Agency: City of Imperial

Timing: Prior to Building Permit

HYDROLOGY AND WATER QUALITY

The following mitigation measures are needed to reduce the potential impacts to Hydrology and Water Quality to a level below significance:

Impact HQ-1- Construction activities may result in loss of topsoil and/or erosion.

Mitigation Measure HQ-1- The project will need to prepare a Storm Water Pollution Prevention Plan (SWPPP) complying with the State Water Resources Control Board General Permit and the City of Imperial MS4 Permit requirements in order to obtain NPDES permits. Erosion Control Plans including best management practices (BMPs) shall be prepared as part of the SWPPP.

Impact HQ-2- Surface runoff will increase significantly as a result of the project necessitating a comprehensive stormwater collection and discharge system. Any proposed retention basin and storm water conveyance system will impact the North Central Drain 2 which is owned and operated by the Imperial Irrigation District.

Mitigation Measure HQ-2-The project shall incorporate independent retention basins for the single family subdivision and the apartment complex development for stormwater infrastructure to address the stormwater demand of both prior to transmitting to a comprehensive discharge system. The retention facilities' design and improvement plans shall be reviewed and approved by the IID. The developer shall follow the requirements set forth in the Imperial Irrigation District's Developer Project Guide. A comprehensive hydraulic

drainage system analysis will be required to be performed by the IID. Fees required to conduct this system analysis will be the responsibility of the developer.

Impact HQ-3 The project site is adjacent to a number of canals and drains owned and operated by the Imperial Irrigation that may restrict project access. The IID claims a prescriptive right of way on the slope of all existing canals and drains, and requires encroachment permits for any level of access, and requires barrier walls/fences in order to prevent pedestrian hazards from channels they have authorized to remain open.

Mitigation Measure HQ-3 The developer shall not use IID's canal or drain banks to access the project site. A perimeter wall or fence shall be constructed between the proposed development and the IID channels in order to address safety concerns. The wall/fence shall be constructed to the satisfaction of IID to meet the minimum safety requirements and will require perimeter landscaping by the City of Imperial for those walls visible from a public roadway. Any abandonment of district easements shall be approved by IID based system requirements. The IID may further claim additional secondary easements/prescriptive rights of ways to ensure operation and maintenance of IID's facilities can be maintained and are not impacted.

Impact HQ-4 The project site directly abuts canal banks and drain banks that are at a higher elevation than the project site which may pose a flooding concern. Additional concerns include run-off that may be generated from the Banta Road/Nance Road intersection and onto the project site.

Impact HQ-4 The finish floor elevation of all on-site development shall be 18-inches above the highest top of curb at the south side of the development. An updated hydrology report may be required to be submitted to the City of Imperial to support final improvement plans.

Implementing Party: Developer

Monitoring Agency: City of Imperial and Imperial Irrigation District

Timing: Prior to Building Permit

LAND USE AND PLANNING SERVICES

The land use and planning findings under this section are closely tied to findings and mitigation measures found under the Hazards section of this MND and the Noise section of this MND. The following mitigation measures to address land use impacts are necessary in addition to those mitigation measures noted in the aforementioned sections, and complement one another.

Impact LU-1 - The Imperial County Airport Land Use Compatibility Plan establishes maximum densities for Zone C of 6 dwelling units per acre which will be exceeded by the proposed Russell Court Subdivision, thus said used is determined to be incompatible with the 1996 adopted IC ALUCP.

Mitigation LU-1 - The Imperial City Council shall review all facts in evidence and make findings of consistency with the purposes of Section 21670 of Aeronautics Law, updated on August, 2015 prior to, or concurrent, with the requested discretionary approvals.

Implementing Party: City of Imperial Planning Department

Monitoring Agency: Imperial County Airport Land Use Commission and California State Department of Aeronautics

Timing: Prior to Building Permit

NOISE

The following mitigation measures are needed to reduce the potential impacts to Noise to a level below significance.

Impact N-1 - A substantial temporary increase in ambient noise levels in the project vicinity occur during the construction activities that may affect existing sensitive receptors.

Mitigation N-1 -Prior to the issuance of a Notice to Proceed, the City of Imperial Planning Director shall ensure the following noise control measures are shown on applicable grading and building plans as details, notes or as otherwise appropriate:

- Construction scheduling will comply with City of Imperial Noise Element and Imperial County noise standards, whichever is stricter in setting forth maximum noise levels as related to potentially sensitive surrounding land uses.
- Construction scheduling for the project area shall be limited to the hours of 7 a.m. and 7 p.m. Monday through Friday with the exception of legal holidays. The Building Department may issue a written "early work permit" if hot or inclement weather creates a need to start earlier than 7 a.m.
- The construction contractor shall ensure that stockpiling and vehicle-staging areas are located as far as practical from noise-sensitive receptors during construction activities.
- During construction, all fixed equipment (e.g., air compressors, generators, etc) shall be located as far from the residential properties as is reasonably feasible and directed away from sensitive noise receivers.
- During construction, contracts shall specify that all construction equipment shall be equipped with mufflers and other suitable noise attenuation devices and that they be operating adequately including properly working mufflers.

Implementing Party: Developer

Monitoring Agency: City of Imperial

Timing: During Construction

PUBLIC SERVICES

The following mitigation measures shall be implemented to reduce project-related impacts to traffic and circulation to a level below significance.

Impact PS-1 - The proposed development will result in a demand of 1.97 acres of park space based on a population increase of 660 persons and an adopted ratio of three acres per 1,000 in population.

Mitigation PS-1 -The proposed on-site retention basin shall be designed for dual use as Open Space/Recreation and shall incorporate shade trees and landscape areas. The basin area shall be able to support shade trees and limited landscaping in support of water conservation efforts. A landscaping plans shall be submitted for review and approval by the City Public Works Department.

Implementing Party: Developer

Monitoring Agency: City of Imperial

Timing: Prior to Building Permit Issuance

TRAFFIC & TRANSPORTATION

The following mitigation measures shall be implemented to reduce project-related impacts to traffic and circulation to a level below significance.

Impact T-1 Due to the existing failing conditions of four intersections any additional traffic during construction activities will result in temporary, yet potentially significant impacts, particularly during peak hours to existing County and City roadways.

Mitigation Measure T-1 It shall be necessary for the developer to prepare a traffic control plan prior to initiating any grading and/or construction activities and obtain encroachment permits from the corresponding agency. The traffic control plan shall be reviewed and approved by the City of Imperial and the County of Imperial Department of Public Works.

Impact T-2 Based on the traffic generated traffic volumes it was calculated that the Barioni/Worthington corridor would significantly impact circulation at four failing intersections.

Mitigation Measure T-2 To improve operations along the Worthington/Barioni corridor the following mitigation measures shall be incorporated:

1. Barioni Boulevard at State Route 86-Change the phasing to eliminate the split phase timing configuration to Barioni Blvd at State Route 86.
2. Barioni Boulevard at "B" Street-Remove stop controls on Barioni Blvd at "B" Street.
3. Worthington Road at Nance Road- Add stop controls on Worthington Road at Nance Road.

4. Worthington Road at Austin Road-Add a 100' northbound right turn lane and a 200' westbound left turn on Worthington Road at Austin Road.

Impact T-3 The proposed site access from Nance Road encroaches into Imperial Irrigation District right-of-way/easements.

Mitigation Measure T-3 Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to: surface improvements such as proposed new streets, driveways, and parking lots shall require an Encroachment Permit the IID. When additional crossings or modification to the existing ones are needed, the developer will be responsible for the cost of these improvements and IID will design and construct them. An IID planning review will be required for the project in accordance with Water Department developer guidelines. IID's Developer Project Guide is available at the website: https://www.iid.com/home/showdocument?id=2328.

Impact T-4 Worthington Road, Brewer Road, and Nance Road abutting the project site are not improved to design capacity.

Mitigation Measure T-4 Worthington Road and Brewer Road along the project site shall be improved to half width and per the City of Imperial's adopted standards per their assigned roadway classification. Nance Road will be required to be improved to full width standards along the Newside Canal crossing requiring pipelining by IID and intersection with Banta Road only.

Implementing Party: Developer

Monitoring Agency: City of Imperial

Timing: Prior to Building Permit Issuance and During Construction

Notice of Determination

Filed in County Clerk's Office, IMPERIAL COUNTY
CHUCK STOREY
COUNTY CLERK/RECORDER

04/25/2017
02:19 PM
Joanna Lerno

Deputy Joanna Lerno

File#: 13-2017-050

13-2017-050

Doc Type: EIR
Fees: N/A

THIS SPACE RESERVED FOR CLERK USE ONLY

DOCUMENT TITLE (S): ENVIRONMENTAL DOCUMENT FILING

Print Form

Notice of Determination

Appendix D

To:

☒ Office of Planning and Research

U.S. Mail: P.O. Box 3044, Sacramento, CA 95812-3044

Street Address: 1400 Tenth St., Rm 113, Sacramento, CA 95814

☒ County Clerk
County of: Imperial
Address: 940 W, Main Street, Suite 202
El Centro, CA 92243

From:
Public Agency: City of Imperial
Address: 420 S. Imperial Ave
Imperial, CA 92251
Contact: Jorge Galvan
Phone: (760) 355-1152

Lead Agency (if different from above):

Address:

Contact:
Phone:

POSTED
APR 25 2017
IMPERIAL COUNTY CLERK-RECORDER
CALIFORNIA

SUBJECT: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to State Clearinghouse): 2017011001

Project Title: Russell Court Subdivision, Annexation, General Plan Amendment, Pre-Zone, & Text Amendment

Project Applicant: Ray D. Roben Sr; Roben LLC,Stephen J. Urih, &Vicki L.Urih

Project Location (include county): North West Corner of Nance Rd. and Brewer Rd. in Imperial County

Project Description:
The applicants propose to subdivide approximately 30 acres of land at the following APNs: 064-013-003, 064-020-043, 064-013-004, 064-254-084, 064-254-086, 064-254-087, and 064-254-088. Project includes 130 single family residential units, 66 apartments, and one single family home on a .68 acre lot. Additionally the applicants propose to pre-zone and annex said properties into the city of Imperial from an unincorporated area of Imperial County. The project will require a general plan amendment from low density residential to low medium density residential in order to accommodate the proposed development

This is to advise that the City of Imperial (☒ Lead Agency or ☐ Responsible Agency) has approved the above described project on 4/19/2017 (date) and has made the following determinations regarding the above described project.

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project.
4. A mitigation reporting or monitoring plan [☒ was ☐ was not] adopted for this project.
5. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
6. Findings [☐ were ☒ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the negative Declaration, is available to the General Public at:
420 S. Imperial Avenue, Imperial, CA 92251

Signature (Public Agency): _____ Title: Planning Director

Date: 04.25.17 Date Received for filing at OPR: _____

Authority cited: Sections 21083, Public Resources Code.
Reference Section 21000-21174, Public Resources Code.

Revised 2011