Project Specific
Preliminary Water Quality Management Plan

For: **Jefferson Square Residential**

SWC of Jefferson Street and Fred Waring Drive, La Quinta, CA

DEVELOPMENT NO. **SDP2022-xxxx; Parcels 6 and 7 of Parcel Map No. 36241**
DESIGN REVIEW NO. **SDP2022-XXXX**
ASSESSOR PARCEL NUMBERS: 604-521-013, 014

Prepared for:

Beacon Realty Advisors LLC
1844 Camino Del Mar #11
Del Mar, CA 92014
Telephone: 214-923-3246

Legal Owner: Beacon Realty Advisors LLC

Prepared by:
Cory Mack, PE
DRC ENGINEERING, INC.
160 S Old Springs Road, Suite 210
Anaheim Hills, CA 92808
Telephone: 714-685-6860

Original Date Prepared: November 30, 2022

Revision Date(s):

OWNER'S CERTIFICATION

This project-specific Water Quality Management Plan (WQMP) has been prepared for:

Beacon Realty Advisors LLC
by DRC Engineering, Inc.
for the project known as **Jefferson Square Residential** at the **SWC of Jefferson Street and Fred Waring Drive, La Quinta, CA**.

Legal Owner: Beacon Realty Advisors LLC

This WQMP is intended to comply with the requirements of City of La Quinta for **Parcels 6 and 7 of Parcel Map No. 36241**, which includes the requirement for the preparation and implementation of a project-specific WQMP.
The undersigned, while owning the property/project described in the preceding paragraph, shall be responsible for the implementation of this WQMP and will ensure that this WQMP is amended as appropriate to reflect up-to-date conditions on the site. This WQMP will be reviewed with the facility operator, facility supervisors, employees, tenants, maintenance and service contractors, or any other party (or parties) having responsibility for implementing portions of this WQMP. At least one copy of this WQMP will be maintained at the project site or project office in perpetuity.

The undersigned is authorized to certify and to approve implementation of this WQMP. The undersigned is aware that implementation of this WQMP is enforceable under City of La Quinta Water Quality Ordinance (Municipal Code Section 8.70).

If the undersigned transfers its interest in the subject property/project, the undersigned shall notify the successor in interest of its responsibility to implement this WQMP.

"I, the undersigned, certify under penalty of law that I am the owner of the property that is the subject of this WQMP, and that the provisions of this WQMP have been reviewed and accepted and that the WQMP will be transferred to future successors in interest."

_____
Owner's Signature

_____
Owner's Printed Name

_____
Owner's Title/Position

_____
Date

1844 Camino Del Mar #11
Del Mar, CA 92014
214-923-3246

ATTEST

_____
Notary Signature

_____
Printed Name

_____
Title/Position

_____
Date

THIS FORM SHALL BE NOTARIZED BEFORE ACCEPTANCE OF THE FINAL PROJECT SPECIFIC WQMP

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TABLES

APPENDICES

I. Project Description

Project Owner: **Beacon Realty Advisors LLC**
1844 Camino Del Mar #11
Del Mar, CA 92014
Telephone: 214-923-3246

WQMP Preparer: Cory Mack, PE.
160 S Old Springs Road, Suite 210
Anaheim Hills, CA 92808
Telephone: 714-685-6860

Project Site Address:	SWC of Jefferson Street and Fred Waring Drive La Quinta, CA
Planning Area/ Community Name/ Development Name:	Coachella Valley / City of La Quinta/ Jefferson Square
APN Number(s):	604-521-013, 014
Latitude & Longitude:	Latitude: 33.7280°, Longitude: -116.2698°
Receiving Water:	Coachella Valley Stormwater Channel
Project Site Size:	5.11 Acres (3.36 Acres Disturbed)
Standard Industrial Classification (SIC) Code:	6513 - Operators of Apartment Buildings 86410501 - Condominium Association
Formation of Home Owners' Association (HOA) or Property Owners Association (POA):	Y ☒ N ☐

Additional Permits/Approvals required for the Project:

AGENCY	Permit required
State Department of Fish and Wildlife, Fish and Game Code §1602 Streambed Alteration Agreement	Y ☐ N☒
State Water Resources Control Board, Clean Water Act (CWA) Section 401 Water Quality Certification	Y ☐ N☒
US Army Corps of Engineers, CWA Section 404 permit	Y ☐ N☒
US Fish and Wildlife, Endangered Species Act Section 7 biological opinion	Y ☐ N☒
Statewide Construction General Permit Coverage	Y ☒ N☐
Statewide Industrial General Permit Coverage	Y ☐ N☒
Other *(please list in the space below as required)* City of La Quinta Grading and Building Permits	

The project site is located at the southwest corner of Fred Waring Drive and Jefferson Street in the existing Jefferson Square retail center. The site is currently in use as a retail center with a CVS store and various other smaller shops. A vacant building that was a former Fresh and Easy grocery store is also located on the site. The remainder of the site is improved with parking lot and two graded commercial pads. The Esplanade community is located to the north. South of the site is the Monticello community and the Monticello Park is located directly to the west. East of the site is a shopping center that is within the City of Indio. The project site will disturb approximately 3.4 acres of the two legal lots that total 5.1 acres. The entire Jefferson Square retail center is 10.5 acres in area. The proposed addition / renovation consists of construction of a new 3-story apartment complex occupying 61,144 square feet and two condominium buildings occupying 41,430 square feet.

The proposed development will be consistent with the previously approved hydrology report prepared for the Jefferson Square retail center. Tributary areas to each watershed are designed to substantially match the existing condition. Existing aboveground infiltration basins and underground infiltration systems were adequately designed in the original development of Jefferson Square to accommodate the currently proposed development. Existing hydrodynamic separators manufactured by Hydro International provide pretreatment of the runoff before it enters the underground infiltration chamber. Since the proposed drainage areas closely follow the existing condition, additional permanent structural pre-treatment and treatment devices are not proposed as part of this project.

Appendix A of this project-specific WQMP includes a complete copy of the final conditions of approval (To be added in the final report). Appendix B of this project-specific WQMP includes:

a. A Vicinity Map identifying the project site and surrounding planning areas in sufficient detail; and

b. A Site Plan for the project. The Site Plan included as part of Appendix B depicts the following project features:

   - Location and identification of all structural BMPs, including Source Control, LID/Site Design and Treatment Control BMPs.
   - Landscaped areas.
   - Paved areas and intended uses (i.e., parking, outdoor work area, outdoor material storage area, sidewalks, patios, tennis courts, etc.).
   - Number and type of structures and intended uses (i.e., buildings, tenant spaces, dwelling units, community facilities such as pools, recreation facilities, etc.).
   - Infrastructure (i.e., streets, storm drains, etc.) that will revert to public agency ownership and operation.
   - Location of existing and proposed public and private storm drainage facilities (i.e., storm drains, channels, basins, etc.), including catch basins and other inlets/outlet structures. Existing and proposed drainage facilities should be clearly differentiated.
   - Location(s) of Receiving Waters to which the project directly or indirectly discharges.
   - Location of points where onsite (or tributary offsite) flows exit the property/project site.

- Delineation of proposed drainage area boundaries, including tributary offsite areas, for each location where flows exit the project site and existing site (where existing site flows are required to be addressed). Each tributary area should be clearly denoted.
- Pre- and post-project topography.

Appendix I is a one-page form that summarizes pertinent information relative to this project-specific WQMP.

II. Site Characterization

Land Use Designation or Zoning: Commercial

Current Property Use: Commercial

Proposed Property Use: Residential

Availability of Soils Report: Y ☒ N ☐ *Note: A soils report is required if infiltration BMPs are utilized. Attach report in Appendix E.*

Phase 1 Site Assessment: Y ☐ N ☒ *Note: If prepared, attached remediation summary and use restrictions in Appendix H.*

Receiving Waters for Urban Runoff from Site

Receiving Waters	303(d) List Impairments	Designated Beneficial Uses	Proximity to RARE Beneficial Use
Coachella Valley Storm Water Channel	DDT, Dieldrin, Indicator Bacteria, Nitrogen, Ammonia (Total Ammonia), PCBs, Toxaphene, Toxicity	FRESH, REC I, REC II, WARM, WILD, RARE	1.6 Miles

III. Pollutants of Concern

Table 1. Pollutant of Concern Summary

Pollutant Category	Potential for Project and/or Existing Site	Causing Receiving Water Impairment
Bacteria/Virus	Yes	Yes
Heavy Metals	Yes	No
Nutrients	Yes	No
Toxic Organic Compounds	Yes	No
Sediment/Turbidity	Yes	No
Trash & Debris	Yes	No
Oil & Grease	Yes	No
Other (specify pollutant): Toxaphene	No	Yes
Other (specify pollutant): Dieldrin	No	Yes
Other (specify pollutant): DDT	No	Yes
Other (specify pollutant): PCB	No	Yes
Other (specify pollutant): Total Ammonia	No	Yes
Other (specify pollutant): Toxicity	No	Yes

Note: *Toxaphene, DDT, PCB, and Dieldrin have been banned in the U.S.*

IV. Hydrologic Conditions of Concern

Local Jurisdiction Requires On-Site Retention of Urban Runoff:

Yes ☒ The project will be required to retain urban runoff onsite in conformance with local ordinance (See Table 6 of the WQMP Guidance document, "Local Land use Authorities Requiring Onsite Retention of Stormwater"). This section does not need to be completed; however, retention facility design details and sizing calculations must be included in Appendix F.

No ☐ This section must be completed.

This Project meets the following condition:

☐ **Condition A**: 1) Runoff from the Project is discharged directly to a publicly-owned, operated and maintained MS4 or engineered and maintained channel, 2) the discharge is in full compliance with local land use authority requirements for connections and discharges to the MS4 (including both quality and quantity requirements), 3) the discharge would not significantly impact stream habitat in proximate Receiving Waters, **and** 4) the discharge is authorized by the local land use authority.

☐ **Condition B**: The project disturbs less than 1 acre and is not part of a larger common plan of development that exceeds 1 acre of disturbance. The disturbed area calculation must include all disturbances associated with larger plans of development.

☐ **Condition C**: The project's runoff flow rate, volume, velocity and duration for the post-development condition do not exceed the pre-development condition for the 2-year, 24-hour and 10-year 24-hour rainfall events. This condition can be achieved by, where applicable, complying with the local land use authority's on-site retention ordinance, or minimizing impervious area on a site and incorporating other Site-Design BMP concepts and LID/Site Design BMPs that assure non-exceedance of pre-development conditions. This condition must be substantiated by hydrologic modeling methods acceptable to the local land use authority.

☐ **None:** Refer to Section 3.4 of the Whitewater River Region WQMP Guidance document for additional requirements.

Supporting engineering studies, calculations, and reports are included in Appendix C.

	2 year – 24 hour		10 year – 24 hour	
	Precondition	**Post-condition**	**Precondition**	**Post-condition**
Discharge (cfs)				
Velocity (fps)				
Volume (cubic feet)				
Duration (minutes)				

V. Best Management Practices

This project implements Best Management Practices (BMPs) to address the Pollutants of Concern that may potentially be generated from the use of the project site. These BMPs have been selected and implemented to comply with Section 3.5 of the WQMP Guidance document, and consist of Site Design BMP concepts, Source Control, LID/Site Design and, if/where necessary, Treatment Control BMPs as described herein.

V.1 Site Design BMP Concepts, LID/Site Design and Treatment Control BMPs

Local Jurisdiction Requires On-Site Retention of Urban Runoff:

Yes ☒ The project will be required to retain Urban Runoff onsite in conformance with local ordinance (See Table 6 of the WQMP Guidance document, "Local Land use Authorities Requiring Onsite Retention of Stormwater). **The LID/Site Design measurable goal has thus been met (100%), and Sections V.1.A and V.1.B do not need to be completed**; however, retention facility design details and sizing calculations must be included in Appendix F, and '100%' should be entered into Column 3 of Table 6 below.

No ☐ Section V.1 must be completed.

This section of the Project-Specific WQMP documents the LID/Site Design BMPs and, if/where necessary, the Treatment Control BMPs that will be implemented on the project to meet the requirements detailed within Section 3.5.1 of the WQMP Guidance document. Section 3.5.1 includes requirements to implement Site Design Concepts and BMPs, and includes requirements to address Pollutants of Concern with BMPs. Further, sub-section 3.5.1.1 specifically requires that Pollutants of Concern be addressed with LID/Site Design BMPs to the extent feasible.

LID/Site Design BMPs are those BMPs listed within Table 2 below which promote retention and/or feature a natural treatment mechanism; off-site and regionally-based BMPs are also LID/Site Design BMPs, and therefore count towards the measurable goal, if they fit these criteria. This project incorporates LID/Site Design BMPs to fully address the Treatment Control BMP requirement where and to the extent feasible. If and where it has been acceptably demonstrated to the local land use authority that it is infeasible to fully meet this requirement with LID/Site Design BMPs, Section V.1.B (below) includes a description of the conventional Treatment Control BMPs that will be substituted to meet the same requirements.

In addressing Pollutants of Concern, BMPs are selected using Table 2 below.

Table 2. BMP Selection Matrix Based Upon Pollutant of Concern Removal Efficiency (1)

(Sources: Riverside County Flood Control & Water Conservation District Design Handbook for Low Impact Development Best Management Practices, dated September 2011, the Orange County Technical Guidance Document for Water Quality Management Plans, dated May 19, 2011, and the Caltrans Treatment BMP Technology Report, dated April 2010 and April 2008)

Pollutant of Concern	Landscape Swale[2, 3]	Landscape Strip[2, 3]	Biofiltration (with underdrain)[2, 3]	Extended Detention Basin[2]	Sand Filter Basin[2]	Infiltration Basin[2]	Infiltration Trench[2]	Permeable Pavement[2]	Bioretention (w/o underdrain)[2, 3]	Other BMPs Including Proprietary BMPs[4, 6]
Sediment & Turbidity	M	M	H	M	H	H	H	H	H	Varies by Product[5]
Nutrients	L/M	L/M	M	L/M	L/M	H	H	H	H	
Toxic Organic Compounds	M/H	M/H	M/H	L	L/M	H	H	H	H	
Trash & Debris	L	L	H	H	H	H	H	L	H	
Bacteria & Viruses (also: Pathogens)	L	M	H	L	M	H	H	H	H	
Oil & Grease	M	M	H	M	H	H	H	H	H	
Heavy Metals	M	M/H	M/H	L/M	M	H	H	H	H	

Abbreviations:

L: Low removal efficiency M: Medium removal efficiency H: High removal efficiency

Notes:

(1) Periodic performance assessment and updating of the guidance provided by this table may be necessary.

(2) Expected performance when designed in accordance with the most current edition of the document, "Riverside County, Whitewater River Region Stormwater Quality Best Management Practice Design Handbook".

(3) Performance dependent upon design which includes implementation of thick vegetative cover. Local water conservation and/or landscaping requirements should be considered; approval is based on the discretion of the local land use authority.

(4) Includes proprietary stormwater treatment devices as listed in the CASQA Stormwater Best Management Practices Handbooks, other stormwater treatment BMPs not specifically listed in this WQMP (including proprietary filters, hydrodynamic separators, inserts, etc.), or newly developed/emerging stormwater treatment technologies.

(5) Expected performance should be based on evaluation of unit processes provided by BMP and available testing data. Approval is based on the discretion of the local land use authority.

(6) When used for primary treatment as opposed to pre-treatment, requires site-specific approval by the local land use authority.

V.1.A SITE DESIGN BMP CONCEPTS AND LID/SITE DESIGN BMPS

This section documents the Site Design BMP concepts and LID/Site Design BMPs that will be implemented on this project to comply with the requirements detailed in Section 3.5.1 of the WQMP Guidance document.

- Table 3 herein documents the implementation of the Site Design BMP Concepts described in sub-sections 3.5.1.3 and 3.5.1.4.
- Table 4 herein documents the extent to which this project has implemented the LID/Site Design goals described in sub-section 3.5.1.1.

Table 3. Implementation of Site Design Concepts

Design Concept	Technique	Specific BMP	Included			Brief Reason for BMPs Indicated as No or N/A
			Yes	No	N/A	
Site Design BMP Concept 1	**Minimize Urban Runoff, Minimize Impervious Footprint, and Conserve Natural Areas** **(See WQMP Section 3.5.1.3)**	Conserve natural areas by concentrating or clustering development on the least environmentally sensitive portions of a site while leaving the remaining land in a natural, undisturbed condition.	☐	☐	☒	Site is pre-developed and does not contain natural, undisturbed conditions.
		Conserve natural areas by incorporating the goals of the Multi-Species Habitat Conservation Plan or other natural resource plans.	☒	☐	☐	
		Preserve natural drainage features and natural depressional storage areas on the site.	☒	☐	☐	
		Maximize canopy interception and water conservation by preserving existing native trees and shrubs, and planting additional native or drought tolerant trees and large shrubs.	☒	☐	☐	
		Use natural drainage systems.	☒	☐	☐	
		Where applicable, incorporate Self-Treating Areas	☒	☐	☐	
		Where applicable, incorporate Self-Retaining Areas	☒	☐	☐	
		Increase the building floor to area ratio (i.e., number of stories above or below ground).	☒	☐	☐	
		Construct streets, sidewalks and parking lot aisles to minimum widths necessary, provided that public safety and a walkable environment for pedestrians are not compromised.	☒	☐	☐	
		Reduce widths of streets where off-street parking is available.	☐	☐	☒	No street work in the scope of work.
		Minimize the use of impervious surfaces, such as decorative concrete, in the landscape design.	☒	☐	☐	

Table 3. Site Design BMPs (continued)

Design Concept	Technique	Specific BMP	Included			Brief Reason for Each BMP Indicated as No or N/A
			Yes	No	N/A	
Site Design BMP Concept 2	**Minimize Directly Connected Impervious Area (See WQMP Section 3.5.1.4)**	Design residential and commercial sites to contain and infiltrate roof runoff, or direct roof runoff to landscaped swales or buffer areas.	☒	☐	☐	
		Drain impervious sidewalks, walkways, trails, and patios into adjacent landscaping.	☒	☐	☐	
		Incorporate landscaped buffer areas between sidewalks and streets.	☐	☒	☐	Not feasible for this site.
		Use natural or landscaped drainage swales in lieu of underground piping or imperviously lined swales.	☒	☐	☐	
		Where soil conditions are suitable, use perforated pipe or gravel filtration pits for low flow infiltration.	☐	☐	☒	Not feasible for this site.
		Maximize the permeable area by constructing walkways, trails, patios, overflow parking, alleys, driveways, low-traffic streets, and other low-traffic areas with open-jointed paving materials or permeable surfaces such as pervious concrete, porous asphalt, unit pavers, and granular materials.	☐	☒	☐	Not feasible for this site.
		Use one or more of the following:				
		Rural swale system: street sheet flows to landscaped swale or gravel shoulder, curbs used at street corners, and culverts used under driveways and street crossings.	☐	☐	☒	No street work in the scope of work.
		Urban curb/swale system: street slopes to curb; periodic swale inlets drain to landscaped swale or biofilter.	☐	☐	☒	No street work in the scope of work.
		Dual drainage system: first flush captured in street catch basins and discharged to adjacent vegetated swale or gravel shoulder; high flows connect directly to MS4s.	☐	☐	☒	No street work in the scope of work.
		Other comparable and equally effective Site Design BMP concept(s) as approved by the local land use authority (Note: Additional narrative required to describe BMP and how it addresses site design concept).	☐	☐	☒	No street work in the scope of work.
		Use one or more of the following for design of driveways and private residential parking areas:				
		Design driveways with shared access, flared (single lane at street), or wheel strips (paving only under the tires).	☐	☐	☒	Not feasible for this site.

Table 3. Site Design BMPs (continued)

Design Concept	Technique	Specific BMP	Included			Brief Reason for Each BMP Indicated as No or N/A
			Yes	No	N/A	
Site Design BMP Concept 2 (cont'd)	**Minimize Directly Connected Impervious Area** **(See WQMP Section 3.5.1.4)**	Other comparable and equally effective Site Design BMP concept(s) as approved by the local land use authority (Note: Additional narrative required to describe BMP and how it addresses site design concept).	☐	☐	☒	Not feasible for this site.
		Use one or more of the following for design of parking areas:				
		Where landscaping is proposed in parking areas, incorporate parking area landscaping into the drainage design.	☒	☐	☐	
		Overflow parking (parking stalls provided in excess of the Permittee's minimum parking requirements) may be constructed with permeable pavement.	☐	☐	☒	Not feasible for this site.
		Other comparable and equally effective Site Design BMP (or BMPs) as approved by the local land use authority (Note: Additional narrative required describing BMP and how it addresses site design concept).	☐	☐	☒	Not feasible for this site.

Project Site Design BMP Concepts:

N/A

Alternative Project Site Design BMP Concepts:

N/A

Table 4. LID/Site Design BMPs Meeting the LID/Site Design Measurable Goal

(1) DRAINAGE SUB-AREA ID OR NO.	(2) LID/SITE DESIGN BMP TYPE* (See Table 2)	(3) POTENTIAL POLLUTANTS OF CONCERN WITHIN DRAINAGE SUB-AREA (Refer to Table 1)	(4) POTENTIAL POLLUTANTS WITHIN SUB-AREA CAUSING RECEIVING WATER IMPAIRMENTS (Refer to Table 1)	(5) EFFECTIVENESS OF LID/SITE DESIGN BMP AT ADDRESSING IDENTIFIED POTENTIAL POLLUTANTS (U, L, M, H/M, H; see Table 2)	(6) BMP MEETS WHICH DESIGN CRITERIA? (Identify as V_{BMP} OR Q_{BMP})	(7) TOTAL AREA WITHIN DRAINAGE SUB-AREA (Nearest 0.1 acre)
A	INFILTRATION BASIN	BACTERIA/VIRUS, HEAVY METALS, NUTRIENTS, TOXIC ORG. COMPOUNDS, SED./TURBIDITY, TRASH & DEBRIS, OIL & GREASE	NONE	H	V_{BMP}	6.8
B	INFILTRATION BASIN	BACTERIA/VIRUS, HEAVY METALS, NUTRIENTS, TOXIC ORG. COMPOUNDS, SED./TURBIDITY, TRASH & DEBRIS, OIL & GREASE	NONE	H	V_{BMP}	3.7
C	INFILTRATION BASIN	BACTERIA/VIRUS, HEAVY METALS, NUTRIENTS, TOXIC ORG. COMPOUNDS, SED./TURBIDITY, TRASH & DEBRIS, OIL & GREASE	NONE	H	V_{BMP}	2.5
TOTAL PROJECT AREA TREATED WITH LID/SITE DESIGN BMPs (NEAREST 0.1 ACRE)						

*** LID/Site Design BMPs listed in this table are those that <u>completely</u> address the 'Treatment Control BMP requirement' for their drainage sub-area**

Justification of infeasibility for sub-areas not addressed with LID/Site Design BMPs

N/A

V.1.B TREATMENT CONTROL BMPS

Conventional Treatment Control BMPs shall be implemented to address the project's Pollutants of Concern as required in WQMP Section 3.5.1 where, and to the extent that, Section V.1.A has demonstrated that it is infeasible to meet these requirements through implementation of LID/Site Design BMPs.

☒ The LID/Site Design BMPs described in Section V.1.A of this project-specific WQMP completely address the 'Treatment Control BMP requirement' for the entire project site (and where applicable, entire existing site) as required in Section 3.5.1.1 of the WQMP Guidance document. Supporting documentation for the sizing of these LID/Site Design BMPs is included in Appendix F. ***Section V.1.B does not need to be completed**.

☐ The LID/Site Design BMPs described in Section V.1.A of this project-specific WQMP do **NOT** completely address the 'Treatment Control BMP requirement' for the entire project site (or where applicable, entire existing site) as required in Section 3.5.1.1 of the WQMP. ***Section V.1.B must be completed.**

The Treatment Control BMPs identified in this section are selected, sized and implemented to treat the design criteria of V_{BMP} and/or Q_{BMP} for all project (and if required, existing site) drainage sub-areas which were not fully addressed using LID/Site Design BMPs. Supporting documentation for the sizing of these Treatment Control BMPs is included in Appendix F.

Table 5: Treatment Control BMP Summary

(1) DRAINAGE SUB-AREA ID OR NO.	(2) TREATMENT CONTROL BMP TYPE* (See Table 2)	(3) POTENTIAL POLLUTANTS OF CONCERN WITHIN DRAINAGE SUB-AREA (Refer to Table 1)	(4) POTENTIAL POLLUTANTS WITHIN SUB-AREA CAUSING RECEIVING WATER IMPAIRMENTS (Refer to Table 1)	(5) EFFECTIVENESS OF TREATMENT CONTROL BMP AT ADDRESSING IDENTIFIED POTENTIAL POLLUTANTS (U, L, M, H/M, H; see Table 2)	(6) BMP MEETS WHICH DESIGN CRITERIA? (Identify as V_{BMP} OR Q_{BMP})	(7) TOTAL AREA WITHIN DRAINAGE SUB-AREA (Nearest 0.1 acre)
	TOTAL PROJECT AREA TREATED WITH TREATMENT CONTROL BMPs (NEAREST 0.1 ACRE)					

V.1.C MEASURABLE GOAL SUMMARY

This section documents the extent to which this project has met the measurable goal described in WQMP Section 3.5.1.1 of addressing 100% of the project's 'Treatment Control BMP requirement' with LID/Site Design BMPs. Projects required to retain Urban Runoff onsite in conformance with local ordinance are considered to have met the measurable goal; for these instances, '100%' is entered into Column 3 of the Table.

Table 6: Measurable Goal Summary

(1) **Total Area Treated with <u>LID/Site Design</u> BMPs** **(Last row of Table 4)**	(2) **Total Area Treated with <u>Treatment Control</u> BMPs** **(Last row of Table 5)**	(3) **% of Treatment Control BMP Requirement addressed with LID/Site Design BMPs**
N/A	N/A	100%

V.2 SOURCE CONTROL BMPS

This section identifies and describes the Source Control BMPs applicable and implemented on this project.

Table 7. Source Control BMPs

BMP Name	Check One		If not applicable, state brief reason
	Included	Not Applicable	
Non-Structural Source Control BMPs			
Education for Property Owners, Operators, Tenants, Occupants, or Employees	☒	☐	
Activity Restrictions	☒	☐	
Irrigation System and Landscape Maintenance	☒	☐	
Common Area Litter Control	☒	☐	
Street Sweeping Private Streets and Parking Lots	☒	☐	
Drainage Facility Inspection and Maintenance	☒	☐	
Structural Source Control BMPs			
Storm Drain Inlet Stenciling and Signage	☒	☐	
Landscape and Irrigation System Design	☒	☐	
Protect Slopes and Channels	☐	☒	No slopes and channels within or adjacent to the site.
Provide Community Car Wash Racks	☐	☒	Not proposed onsite.
Properly Design*:			
Fueling Areas	☐	☒	Not proposed onsite.
Air/Water Supply Area Drainage	☐	☒	No gas station proposed.
Trash Storage Areas	☒	☐	
Loading Docks	☐	☒	Not proposed onsite.
Maintenance Bays	☐	☒	Not proposed onsite.
Vehicle and Equipment Wash Areas	☐	☒	Not proposed onsite.
Outdoor Material Storage Areas	☐	☒	Not proposed onsite.
Outdoor Work Areas or Processing Areas	☐	☒	Not proposed onsite.
Provide Wash Water Controls for Food Preparation Areas	☐	☒	Not proposed onsite.

*Details demonstrating proper design must be included in Appendix F.

Non-Structural Source Control BMPs

Education for Property Owners, Operators, Tenants, Occupants, or Employees

Responsible Party: Beacon Realty Advisors LLC

Implementation Frequency: Ongoing. Orientation shall be given to property owners, tenants, and occupants within 30 days of startup.

Conditions of approval will require the Property Owner to annually provide environmental awareness education materials to all members. These materials shall include general housekeeping practices that contribute to the protection of Urban Runoff quality and BMPs that eliminate or reduce pollution during subsequent property improvements. These materials or a resource list for obtaining these materials will be available through City of La Quinta. However, City of La Quinta may elect to recover printing costs for such materials. The POA shall request these materials (in writing) at least 30 days prior to the intended distribution date.

Practical information shall be provided on general good housekeeping BMPs and other practices that contribute to protection of storm water quality. This WQMP shall be provided with emphasis placed on the materials included in, but not limited to, Sections V, VI and VII of this report. Educational materials to be used include, but are not limited to, SC-10, Non-Stormwater Discharges, SC-41, Building & Grounds Maintenance, SC-43, Parking/Storage Area Maintenance, The Ocean Begins at Your Front Door, After the Storm–A Citizen's Guide to Understanding Stormwater, Preventing Pollution Through Efficient Water Use, and Protecting Water Quality from Urban Runoff.

Activity Restrictions

Responsible Party: Beacon Realty Advisors LLC

Implementation Frequency: Daily management of operation.

Onsite activities shall be restricted to those currently granted by the City of La Quinta and as stated throughout this WQMP. Some common restrictions are as follows:

- No discharges of fertilizer, pesticides, and wastes to streets or storm drains
- No blowing or sweeping of debris into streets or storm drains
- No hosing down of paved surfaces

In addition, onsite activities shall be limited to the requirements of this WQMP as described herein.

Irrigation System and Landscape Maintenance

Responsible Party: Beacon Realty Advisors LLC

Implementation Frequency: Common area landscape shall be maintained on a weekly basis.

All maintenance shall be consistent with the City of La Quinta Water Quality Ordinance and water conservation ordinance, which can be accessed through City of La Quinta's website or obtained through City of La Quinta's planning/permitting counter. Fertilizer and pesticide usage shall be consistent with the instruction contained on product labels and with regulations administered by California's Department of Pesticide Regulation. Additionally, landscape maintenance must address replacement of dead vegetation, repair of erosion rills, proper disposal of green waste, etc. Irrigation

system maintenance must address periodic testing and observation of the irrigation system to detect overspray, broken sprinkler heads, and other system failures.

Common Area Litter Control

Responsible Party: Beacon Realty Advisors LLC

Implementation Frequency: On a weekly basis

The Owner shall implement trash management and litter control procedures aimed at reducing pollution of storm water runoff. The Owner will contract with a maintenance firm to provide regularly scheduled landscape maintenance and parking lot maintenance that will include litter removal and picking up grass and plant clippings. For additional information, see BMP SC-41, Building & Grounds Maintenance, and SC-43, Parking/Storage Area Maintenance, included in Appendix D.

Street Sweeping Private Streets and Parking Lots

Responsible Party: Beacon Realty Advisors LLC

Implementation Frequency: Monthly and prior to the onset of the rainy season (Oct. 1st)

The Owner shall be responsible for sweeping the surrounding parking lot with a vacuum-type sweeper on a monthly basis to remove debris. The parking area must also be swept prior to the onset of the rainy season (October 1st) each year. Under no circumstances are outdoor areas/lots to be rinsed or washed with water unless said rinse/wash water is collected and disposed of properly (i.e. into the sewer). For additional information, see BMP SC-34, Waste Handling and Disposal and BMP SC-43, Parking/Storage Area Maintenance, included in Appendix D.

Drainage Facility Inspection and Maintenance

Responsible Party: Beacon Realty Advisors LLC

Implementation Frequency: All catch basins/inlets and drywells on the site must be inspected once per year, prior to the rainy season (generally accepted as October 1st through April 30th), and cleaned when necessary. The drainage facilities must be cleaned if accumulated sediment/debris fills 25% or more of the sediment/debris storage capacity.

Structural Source Control BMPs

Storm Drain Inlet Stenciling and Signage

Responsible Party: Beacon Realty Advisors LLC

Implementation Frequency: Inspect a minimum once per year and repair as necessary.

All catch basins/inlets on the site must be marked using the City's "No Dumping - Drains to Ocean" curb marker or stenciled using an approved stencil. Each catch basin must be marked on the top of curb directly above the inlet and on one side of the curb face. This stencil is to alert the public/employees to the destination of pollutants discharged into storm water. The owner shall inspect the catch basins once per year, at minimum, and re-stencil as necessary to maintain legibility. All onsite private catch basins will remain the property of the Owner(s). For additional information,

see BMP SD-13, Storm Drain Signage, in Appendix D and the BMP Maintenance Responsibility/Frequency Matrix in Section VI.

Landscape and Irrigation System Design

Responsible Party: Beacon Realty Advisors LLC

Implementation Frequency: Inspect irrigation equipment on a monthly basis. Check water sensors and adjust irrigation heads and timing monthly.

Design irrigation systems to each landscape area's specific water requirements. The proposed landscape and irrigation system shall group plants with similar water requirements in order to reduce excess irrigation runoff and promote surface filtration. Employ rain shutoff devices to prevent irrigation during and after precipitation events. The timing and application methods of irrigation water shall be designed to minimize the runoff of excess irrigation water into the MS4. Monthly inspection of the irrigation system shall be conducted to insure efficient water uses. For additional information, see BMPs SC-41, Building and Grounds Maintenance, SD-10, Site Design and Landscape Planning, and SD-12, Efficient Irrigation, in Appendix D and the BMP Maintenance Responsibility/Frequency Matrix in Section VI.

Properly Design

Trash Storage Areas

Responsible Party: Beacon Realty Advisors LLC

Maintenance Implementation Frequency: Loose trash will be picked up daily and placed in containers. Trash dumpster pickup shall be a minimum of once a week.

The proposed trash storage areas will be paved with an impervious surface and designed so that drainage from adjoining roofs and pavements will be diverted around the areas. The trash enclosure will be designed according to the City of La Quinta standards. For additional information, see BMP SD-32, Trash Storage Areas, in Appendix D, the BMP Maintenance Responsibility/Frequency Matrix in Section VI, and the trash enclosure details in Appendix F.

Loading Docks

Responsible Party: Beacon Realty Advisors LLC

Maintenance Implementation Frequency: Loose trash will be picked up daily and placed in containers. Cleanup shall be in a weekly basis

Loading docks and shipping/receiving areas should be kept in a clean and orderly condition through regular sweeping and litter control and immediate cleanup of spills and broken containers. Cleanup procedures should minimize or eliminate the use of water. If washdown water is used, it must be contained, collected, and disposed of in an approved manner. For additional information, see BMP SD-31, Maintenance Bays & Docks, in Appendix D, the BMP Maintenance Responsibility/Frequency Matrix in Section VI.

Appendix D includes copies of the educational materials (described in Section 3.5.2.1 of the WQMP Guidance document) that will be used in implementing this project-specific WQMP.

V.3 EQUIVALENT TREATMENT CONTROL ALTERNATIVES

N/A

V.4 REGIONALLY-BASED TREATMENT CONTROL BMPS

N/A

VI. Operation and Maintenance Responsibility for BMPs

Appendix G of this project-specific WQMP includes copies of CC&Rs, Covenant and Agreements, and/or other mechanisms used to ensure the ongoing operation, maintenance, funding, transfer and implementation of the project-specific WQMP requirements.

The BMPs proposed in this WQMP will be operated and maintained by:

Beacon Realty Advisors LLC
1844 Camino Del Mar #11
Del Mar, CA 92014

VII. Funding

The operation and maintenance of the BMPs proposed in this WQMP will be funded by

Beacon Realty Advisors LLC
1844 Camino Del Mar #11
Del Mar, CA 92014

Appendix A

Conditions of Approval

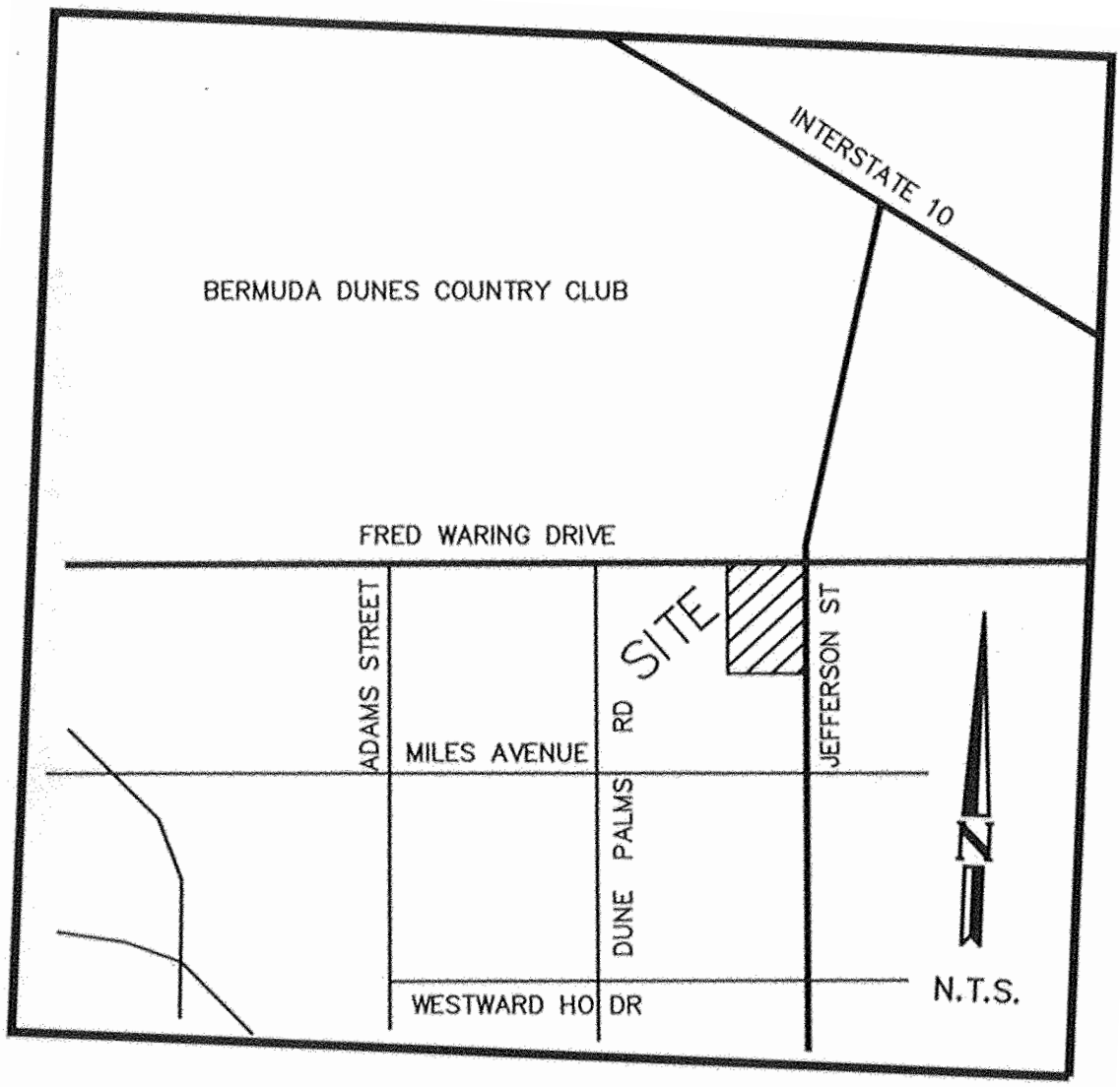
Planning Commission Resolution _____

Dated _____

TO BE PROVIDED IN FINAL ENGINEERING PHASE

Appendix B

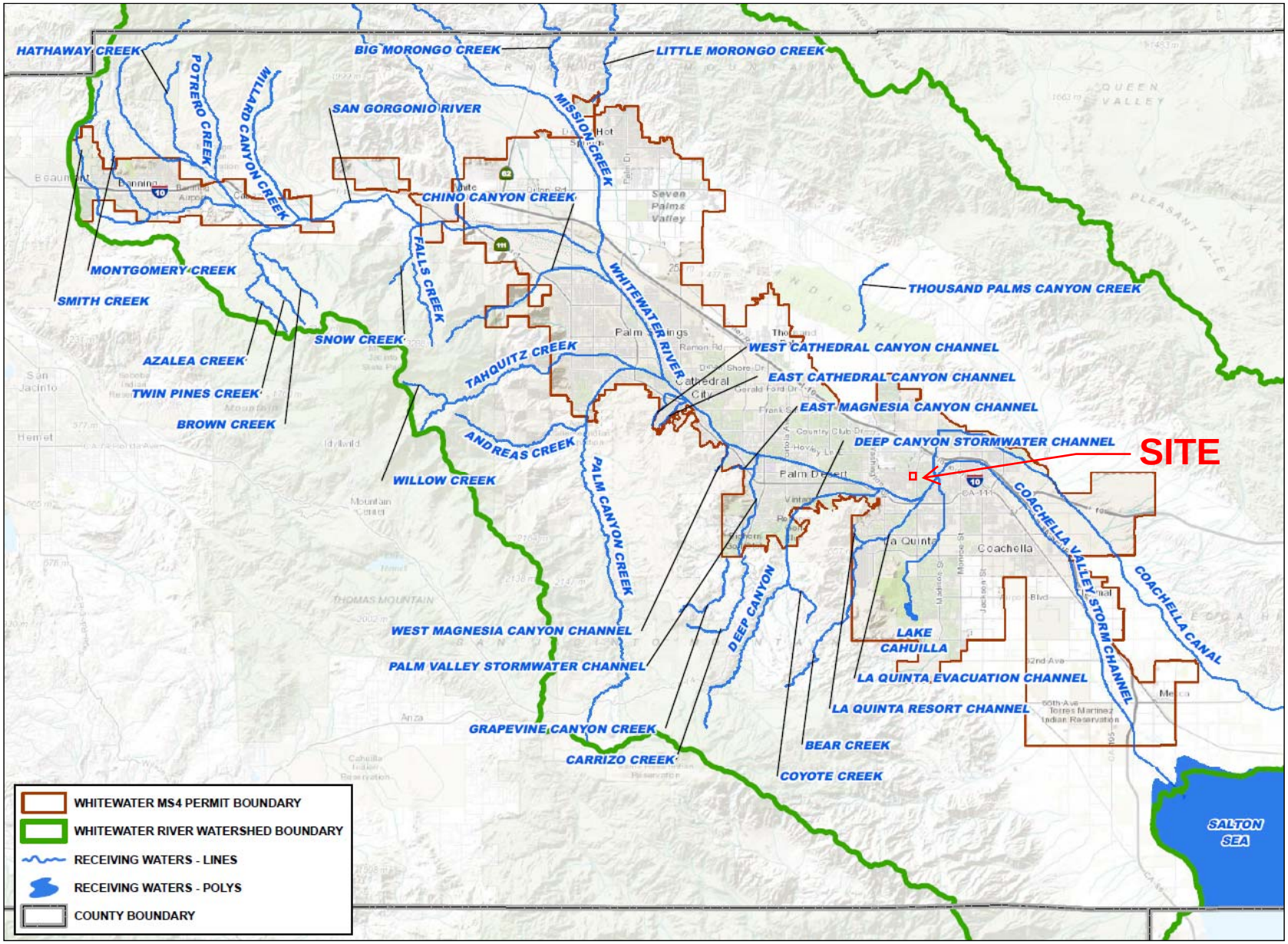
Vicinity Map, WQMP Site Plan, and Receiving Waters Map



VICINITY MAP

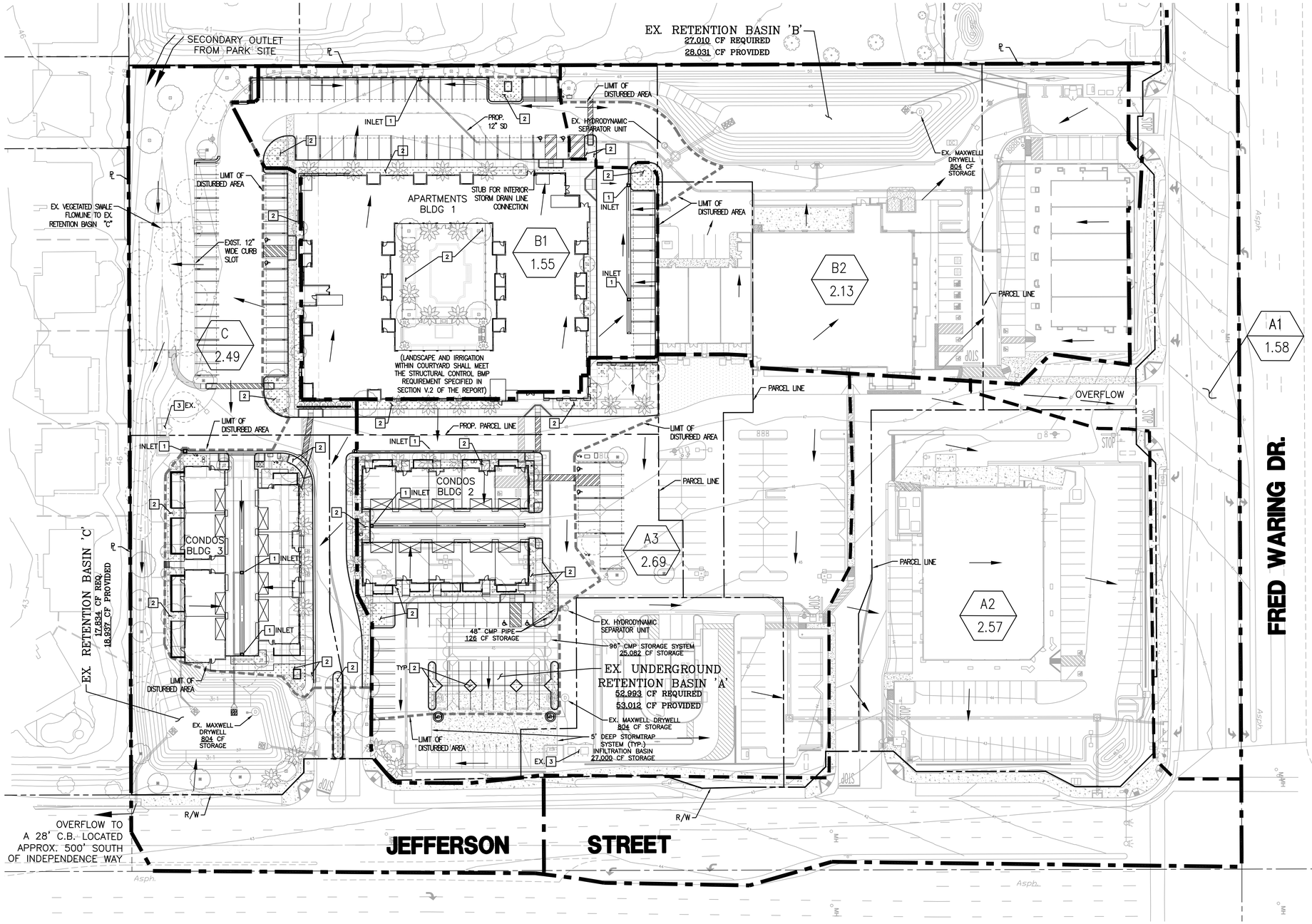
NOT TO SCALE

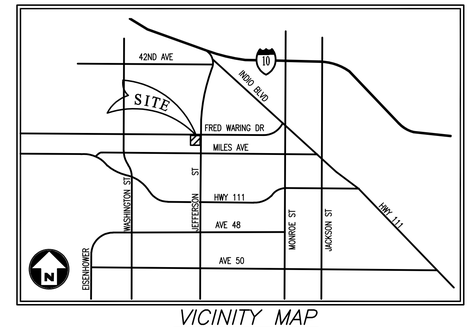
Whitewater River Region Receiving Waters Map



WQMP EXHIBIT

SWC OF JEFFERSON AVE AND FRED WARING DR.
LA QUINTA, CALIFORNIA





VICINITY MAP
N.T.S.

LEGEND:

- A1 / 1.00 — TREATMENT AREA DESIGNATION / ACREAGE
- FLOW PATH
- DMA AREA BOUNDARY
- DMA SUB-AREA BOUNDARY
- LANDSCAPE AREA
- DISTURBED AREA (3.5 ACRES)

TOTAL PROJECT AREA = 5.1 ACRES
(PARCELS 6 AND 7)

STRUCTURAL SOURCE CONTROL BMPS:

1. STORM DRAIN INLET STENCILING AND SIGNAGE
2. LANDSCAPE AND IRRIGATION SYSTEM DESIGN
3. TRASH STORAGE AREA

40' 0' 40' 80' 120'
GRAPHIC SCALE: 1"=40'

JEFFERSON SQUARE RESIDENTIAL – LA QUINTA

PRELIMINARY WQMP EXHIBIT

LA QUINTA, CA

DRC Engineering, Inc.
Civil Engineering/Land Surveying/Land Planning
160 S. Old Springs Road
Suite 210
Anaheim Hills, CA 92808
714-685-6860

Appendix C

Supporting Detail Related to Hydraulic Conditions of Concern

N/A

Appendix D

Educational Materials

TO BE PROVIDED IN FINAL ENGINEERING PHASE

Appendix E

Soils Report

September 21, 2022 KA Project No. 112-22117

Mr. Luis Gomez
goUrban Development
lagomez@gourbandev.com

RE: Update to Geotechnical Engineering Investigation Report
Proposed Jefferson Square Development
44125 Jefferson Street
La Quinta, California

Reference: Geotechnical Engineering Investigation, Proposed Jefferson Square, Jefferson Street & Fred Waring Drive, La Quinta, California, Project No. 112-07036, dated May 25, 2007.

Dear Mr. Gomez:

In accordance with your request, we are providing this letter to update our previous Geotechnical Engineering Investigation report, KA Project No. 112-07036, dated May 25, 2007 for the above-referenced project site.

Based on our review of the proposed site plan and our discussions with the project representative, we understand that the proposed development includes construction of three (3) new multi-story buildings on existing out-lot parcels located at the subject site. These out-lot parcels have been previously graded for the proposed development back then. It is understood that the new proposed structures will be of masonry, wood, or metal framed structure supported on a conventional shallow foundation system.

Based on our recent observation and field work of the subject site, review of the previous geotechnical investigation report, and review of the proposed development site plan, the site and proposed development are consistent with the conclusions and recommendations presented in the previous Geotechnical Engineering Investigation report. Additional information to conform to seismic design requirements of the 2019 California Building Code (2019 CBC) is provided below.

Also, grading recommendations associated with the proposed buildings to be located at the subject site are provided below. In order to prepare these recommendations, we have reviewed the preliminary site plans prepared by Aero Collective and the Geotechnical Engineering Investigation Report prepared by Krazan & Associates, Inc. These recommendations are intended to provide supplemental grading recommendations for preparation of the proposed building pad areas and surrounding paved areas. These recommendations have been requested based on the significant period of time since the initial preparation of the building pad areas.

In the event these structural or grading details are inconsistent with the final design criteria, we should be notified so that we can evaluate the potential impacts of the changes on the recommendations presented in this report and provide an updated report as necessary.

The Site Class per Section 1613 of the 2019 California Building Code (2019 CBC) and ASCE 7-16, Chapter 20 is based upon the site soil conditions. It is our opinion that a Site Class D is most consistent with the subject site soil conditions. For seismic design of the structures based on the seismic provisions of the 2019 CBC, we recommend the following parameters:

Seismic Item	Value	CBC Reference
Site Class	D	Section 1613.2.2
Site Coefficient F_a	1.000	Table 1613.2.3 (1)
S_S	1.948	Section 1613.2.1
S_{MS}	1.948	Section 1613.2.3
S_{DS}	1.298	Section 1613.2.4
Site Coefficient F_v	1.700	Table 1613.2.3 (2)
S_1	0.760	Section 1613.2.1
S_{M1}	1.292	Section 1613.2.3
S_{D1}	0.861	Section 1613.2.4
T_S	0.664	Section 1613.2
PGA_M	0.887g	Figure 22.7

***** Based on Equivalent Lateral Force (ELF) Design Procedure being used.

Site Conditions

It is our understanding, based on a review of the referenced Compaction Reports for Building 1 and Building 3 per the proposed site plan, that remedial grading of the proposed building pad area was performed in 2008. Preliminary site plans indicate the buildings to be of similar size and orientation as the previously graded building pads. Based on our recent site visit and field work, the exposed subgrade associated with the subject building pads was noted to be weathered. The near surface soils were found to possess varying in-place densities and moisture contents.

Building 2 per the proposed site plan is currently been used as an asphalt paved parking lot for the existing shopping center. Site preparation for this area should be perform based on the recommendations presented on the Geotechnical Engineering Investigation referenced above.

Site Preparation

As previously discussed, rough grading of the subject building pads was performed in 2008. Based on visual observations made during a recent site visit, the near surface soils were found to possess varying in-place densities and moisture contents. The near surface soil conditions present at the site are not

considered suitable to support the proposed structures. As such, remedial grading is recommended for the proposed development.

Overexcavation and Recompaction – Building and Foundation Areas

To reduce post-construction soil movement and provide uniform support for the buildings and other foundations, overexcavation and recompaction within the proposed building footprint areas should be performed to a minimum depth of at least twelve (12) inches below existing grades. The actual depth of the overexcavation and recompaction should be determined by our field representative during construction. The exposed subgrade at the base of the overexcavation should then be scarified, moisture-conditioned as necessary, and compacted. The overexcavation and recompaction should also extend laterally five feet (5') beyond edges of the proposed footings or building limits. Any undocumented fill encountered during grading should be removed and replaced with Engineered Fill. This will apply to Building 1 and Building 3 (See Figure 1). For Building 2, recommendations presented on the Geotechnical Engineering Investigation referenced above should be follow.

Overexcavation and Recompaction – Proposed Parking Area

To reduce post-construction soil movement and provide uniform support for the proposed parking and drive areas, overexcavation and recompaction of the near surface soil in the proposed parking area should be performed to a minimum depth of at least twelve (12) inches below existing grades or proposed subgrade, whichever is deeper. The actual depth of the overexcavation and recompaction should be determined by our field representative during construction. The overexcavation and recompaction should also extend laterally at least three (3) feet beyond edges of the proposed paving limits or to the property boundary. Any undocumented fill encountered during grading should be removed and replaced with Engineered Fill.

Any buried structures encountered during construction should be properly removed and the resulting excavations backfilled with Engineered Fill, compacted to a minimum of 95 percent of the maximum dry density based on ASTM Test Method D1557. Excavations, depressions, or soft and pliant areas extending below planned finished subgrade levels should be cleaned to firm, undisturbed soil and backfilled with Engineered Fill. In general, any septic tanks, debris pits, cesspools, or similar structures should be entirely removed. Concrete footings should be removed to an equivalent depth of at least 3 feet below proposed footing elevations or as recommended by the Soils Engineer. Any other buried structures encountered, should be removed in accordance with the recommendations of the Soils Engineer. The resulting excavations should be backfilled with Engineered Fill.

The upper soils, during wet winter months become very moist due to the absorptive characteristics of the soil. Earthwork operations performed during winter months may encounter very moist unstable soils, which may require removal to grade a stable building foundation. Project site winterization consisting of placement of aggregate base and protecting exposed soils during the construction phase should be performed.

A representative of our firm should be present during all site clearing and grading operations to test and observe earthwork construction. This testing and observation is an integral part of our service as acceptance of earthwork construction is dependent upon compaction of the material and the stability of

the material. The Soils Engineer may reject any material that does not meet compaction and stability requirements. Further recommendations of this report are predicated upon the assumption that earthwork construction will conform to recommendations set forth in this section and the Engineered Fill section.

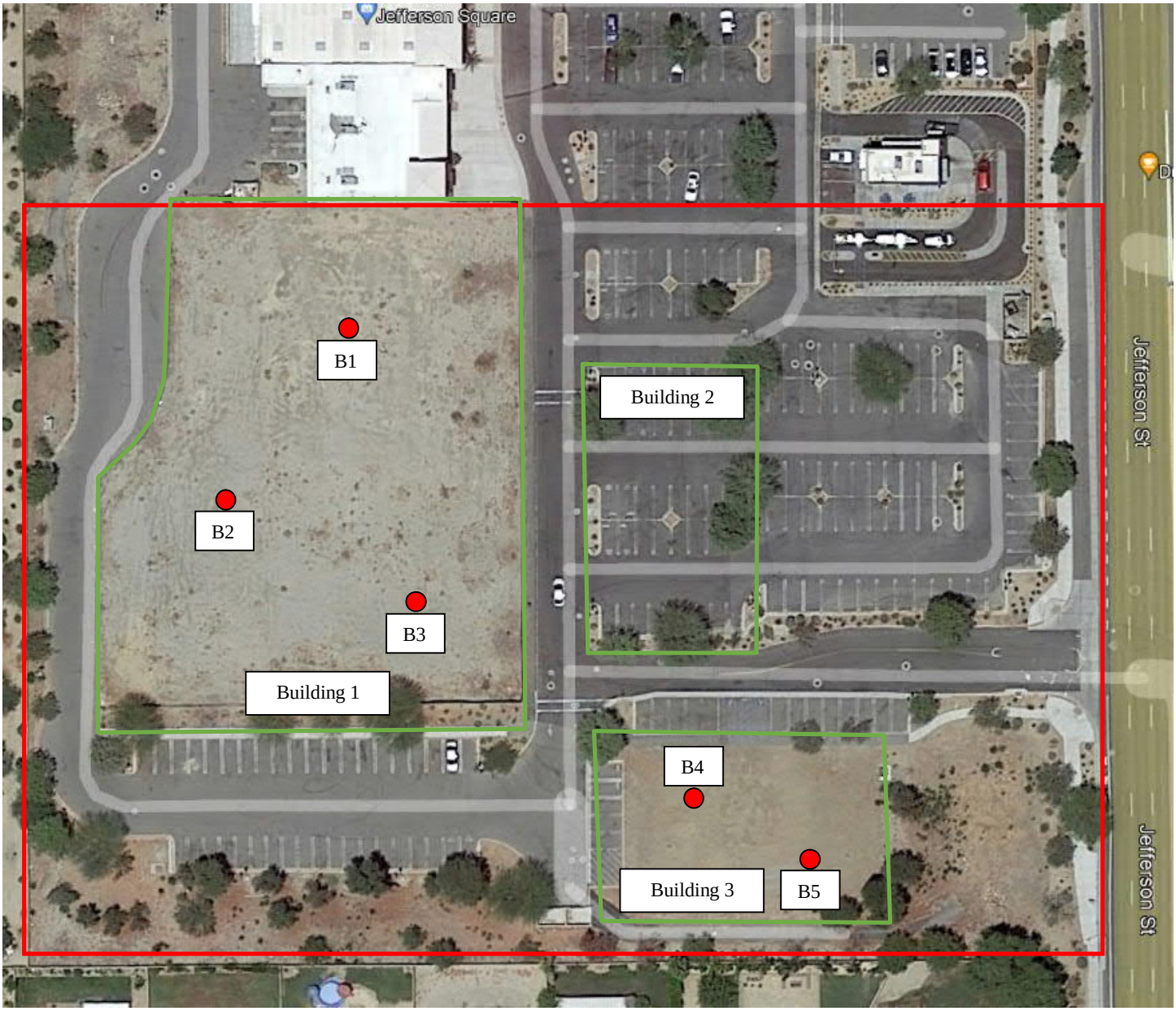
The recommendations and limitations provided in the Geotechnical Engineering Investigation Report prepared by Krazan & Associates, Inc., Project No. 112-07036 apply to this letter and should be incorporated into the design and construction of the proposed development.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (951) 273-1011.

Respectfully submitted,
KRAZAN & ASSOCIATES, INC.

Jorge A. Pelayo, MS, PE
Project Engineer
RCE No. 91269

Figures



APPROXIMATE BORING LOCATION

N
W
E
S

SITE MAP	**Scale:** NTS	**Date:** September, 2022	Krazan GEOTECHNICAL ENGINEERING
PROPOSED JEFFERSON SQUARE DEVELOPMENT 44125 JEFFERSON STREET LA QUINTA, CALIFORNIA	**Drawn by:** AM	**Approved by:** JAP	
	Project No. 112-22117	**Figure No.** 1	

VICINITY MAP	**Scale:** NTS	**Date:** September, 2022	Krazan GEOTECHNICAL ENGINEERING
PROPOSED JEFFERSON SQUARE DEVELOPMENT 44125 JEFFERSON STREET LA QUINTA, CALIFORNIA	**Drawn by:** AM	**Approved by:** JAP	
	Project No. 112-22117	**Figure No.** 2	

GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED JEFFERSON SQUARE
JEFFERSON STREET AND FRED WARING DRIVE
LA QUINTA, CALIFORNIA

PROJECT NO. 112-07036
MAY 25, 2007

PREPARED FOR:

REGENCY CENTERS, INC.
36 EXECUTIVE PARK, SUITE 100
IRVINE, CALIFORNIA 92614

ATTENTION: MR. THOMAS MIDDLETON

PREPARED BY:

KRAZAN & ASSOCIATES, INC.
4221 BRICKELL STREET
ONTARIO, CALIFORNIA 91761
(909) 974-4400

SEISMICITY, LIQUEFACTION POTENTIAL AND SEISMIC INDUCED SETTLEMENT

Seismicity is a general term relating to the abrupt release of accumulated strain energy in the rock materials of the earth's crust in a given geographical area. The recurrence of accumulation and subsequent release of strain have resulted in faults and fault systems. Fault patterns and density reflect relative degrees of regional stress through time, but do not necessarily indicate recent seismic activity; therefore, the degree of seismic risk must be determined or estimated by the seismic record in any given region. Soil liquefaction is a state of soil particle suspension caused by a complete loss of strength when the effective stress drops to zero. Liquefaction normally occurs under saturated conditions in soils such as sand in which the strength is purely frictional. However, liquefaction has occurred in soils other than clean sand. Liquefaction usually occurs under vibratory conditions such as those induced by seismic events. To evaluate the liquefaction potential of the site, the following items were evaluated:

1) Soil type
2) Groundwater depth
3) Relative density
4) Initial confining pressure
5) Intensity and duration of ground shaking

The soils beneath the site consist predominately of dense and stiff materials. Groundwater is expected to be a depth of greater than 50 feet. The potential for liquefaction is considered to be low based on the absence of shallow groundwater and the relatively dense and stiff materials underlying the site.

One of the most common phenomena during seismic shaking accompanying any earthquake is the induced settlement of loose unconsolidated soils. Based on site subsurface conditions and the moderate to high seismicity of the region, any loose granular materials at the site could be vulnerable to this potential hazard. Our analysis of dynamic densification of "dry" soil above the water table in the upper 50 feet of existing soil profile was performed. The seismic densification of dry to damp alluvial sandy soils due to onsite seismic activity is calculated to have total settlements of approximately 2 to 3 inches. To reduce the effects and magnitude of the seismic induced settlements, remedial grading is recommended, as discussed later in this report. Following completion of the recommended remedial grading and foundation design, we estimate that differential settlements of approximately ½ inch in 20 feet laterally may result from seismic densification.

SOIL CORROSIVITY

Corrosion tests were performed to evaluate the soil corrosivity to the buried structures. The results of the tests are included as follows:

Parameter	Results	Test Method
Resistivity	12,500 ohms-cm	Caltrans
Sulfate	Less than 5 mg/kg	EPA 9038
Chloride	23.4 mg/kg	EPA 9253
pH	9.02	EPA 9045C

Krazan & ASSOCIATES, INC.

GEOTECHNICAL ENGINEERING • ENVIRONMENTAL ENGINEERING
CONSTRUCTION TESTING & INSPECTION

July 8, 2008 KA Project No. 112-07036

Mr. Thomas Middleton
Regency Centers Inc.
36 Executive Park, Suite 100
Irvine, CA 92614

RE: Percolation Rate Study
Proposed Shopping Center
Jefferson Street and Fred Waring Drive
La Quinta, California

Dear Mr. Middleton:

In accordance with your request, we have performed percolation testing at the subject site. This report documents the services and provides the results of our field and laboratory study.

PURPOSE AND SCOPE

This study was conducted to measure the approximate percolation rates within the near-surface strata of the site. It is our understanding that the data will be used by the project design team in their development of the on site storm water disposal system. The percolation testing conducted at the subject site was performed in general accordance with the City of La Quinta, Public Works Department, Engineering Bulletin #06-16, Hydrology and Hydraulic Report Criteria for Storm Drain Systems, USBR Percolation Test Standard. Our scope of services was outlined in our change order dated June 11, 2008 (KA Project No. 112-07036) and included the following:

- Conducting three (3) percolation tests within the area of the proposed detention basins at the subject site. Two of the percolation tests were performed at depths of approximately 10 to 13 feet below existing grade. The percolation test for the underground basin was performed at a depth of approximately 20 to 23 feet below the existing grade.

- A total of three exploratory borings were performed adjacent to the percolation tests. These exploratory borings were extended to a depth of at least 15 feet below the bottom of each test.

- Preparation of this report summarizing the results of our investigation.

SITE LOCATION AND SITE DESCRIPTION

The proposed site is located at the intersection of Jefferson Street and Fred Waring Drive in La Quinta, California. The site is roughly rectangular in shape and roughly sloping to the north and east. At the time of our field investigation and testing program, the site was undeveloped and covered with sparse bushes and exposed soil.

SOIL PROFILE AND SUBSURFACE CONDITIONS

The subsurface profile generally consisted of loose to dense fine sand and fine silty sands extending to the maximum depth explored. During the excavation of the borings, continuous visual and physical examination was conducted on the soil cuttings. Significant silt or clay layers/lenses were not identified as being encountered in any of the borings at the site.

Corrosion tests were performed to evaluate the soil corrosivity to the buried structures. The results of the tests are included as follows:

Parameter	Results	Test Method
Resistivity	2,460 ohms-cm	Caltrans
Sulfate	268 mg/kg	EPA 9038
Chloride	117 mg/kg	EPA 9253
pH	7.52	EPA 9045C

Excessive sulfate or chloride in either the soil or native water may result in an adverse reaction between the cement in concrete and the soil. California Building Code has developed criteria for evaluation of sulfate and chloride levels and how they relate to cement reactivity with soil and/or water. The soil samples from the subject site were tested to have a low sulfate and chloride concentrations. Therefore, no special design requirements are necessary to compensate for sulfate or chloride reactivity with the cement. Electrical resistivity testing of the soil indicates that the onsite soils may have a mild potential for metal loss from electrochemical corrosion process.

PERCOLATION TESTING

Two methods for percolation testing are given in the City of La Quinta, Public Works Department, Engineering Bulletin #06-16, Hydrology and Hydraulic Report Criteria for Storm Drain Systems, USBR Percolation Test Standard. Either ASTM Double Ring Infiltrometer Test or U.S. Bureau of Reclamation Test were recommended by the City of La Quinta as approved test methods. The U.S. Bureau of Reclamation method was determined to be the most prudent for the subject site.

The test locations are presented on the attached site plan, Figure 1. Detail results of the percolation tests are attached. The data is presented in tabular format. The soil percolation rates are based on tests conducted with clean water. The infiltration rates may vary with time as a result of soil clogging from water impurities. A factor of safety should be incorporated into the design of the basins to compensate

for these factors. In addition, periodic maintenance consisting of clearing the bottom of the basins should be expected.

The highest percolation rate ranges from 4.25 inches to 6.5 inches per hour. A minimum factor of safety of 2.0 should be assigned to this value. The recommended design percolation rate should be a maximum of 2.0 inches per hour.

LIMITATIONS

Geotechnical Engineering is one of the newest divisions of Civil Engineering. This branch of Civil Engineering is constantly improving as new technologies and understanding of earth sciences advance. Although our services were conducted in accordance with current engineering practice, undoubtedly there will be substantial future improvements in this branch of engineering. In addition to advancements in the field of Soils Engineering, physical changes in the site, either due to excavation or fill placement, new agency regulations, or possible changes in the proposed structure after the soils report is completed may require the soils report to be professionally reviewed. In light of this, the Owner should be aware that there is a practical limit to the usefulness of this report without critical review. Although the time limit for this review is strictly arbitrary, it is suggested that 1 year be considered a reasonable time for the usefulness of this report.

The scope of our services did not include a groundwater study and was limited to the performance of percolation testing and the submitted of the data only. Our services did not include those associated with an Environmental Site Assessment for the presence or absence of hazardous and/or toxic materials in the soil, groundwater, or atmosphere; or the presence of wetlands. Any statements, or absence of statements, in this report regarding odors, unusual or suspicious items, or conditions observed, are strictly for descriptive purposes and are not intended to convey engineering judgment regarding potential hazardous and/or toxic assessment.

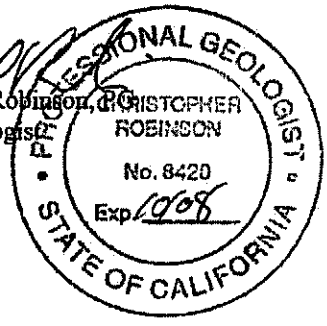
The geotechnical engineering information presented herein is based upon professional interpretation utilizing standard engineering practices. The work conducted through the course of this investigation, including the preparation of this report, have been performed in accordance with the generally accepted standards of geotechnical engineering practice, which existed in the geographic area at the time the report was written. No other warranty, express or implied, is made.

It is not warranted that such information and interpretation cannot be superseded by future geotechnical engineering developments. We emphasize that this report is valid for the project outlined above and should not be used for any other sites.

If you have any questions regarding the services performed or the data reported herein, or if we may be of further assistance, please do not hesitate to contact our office at (909) 974-4400.

Respectfully submitted,
KRAZAN & ASSOCIATES, INC.

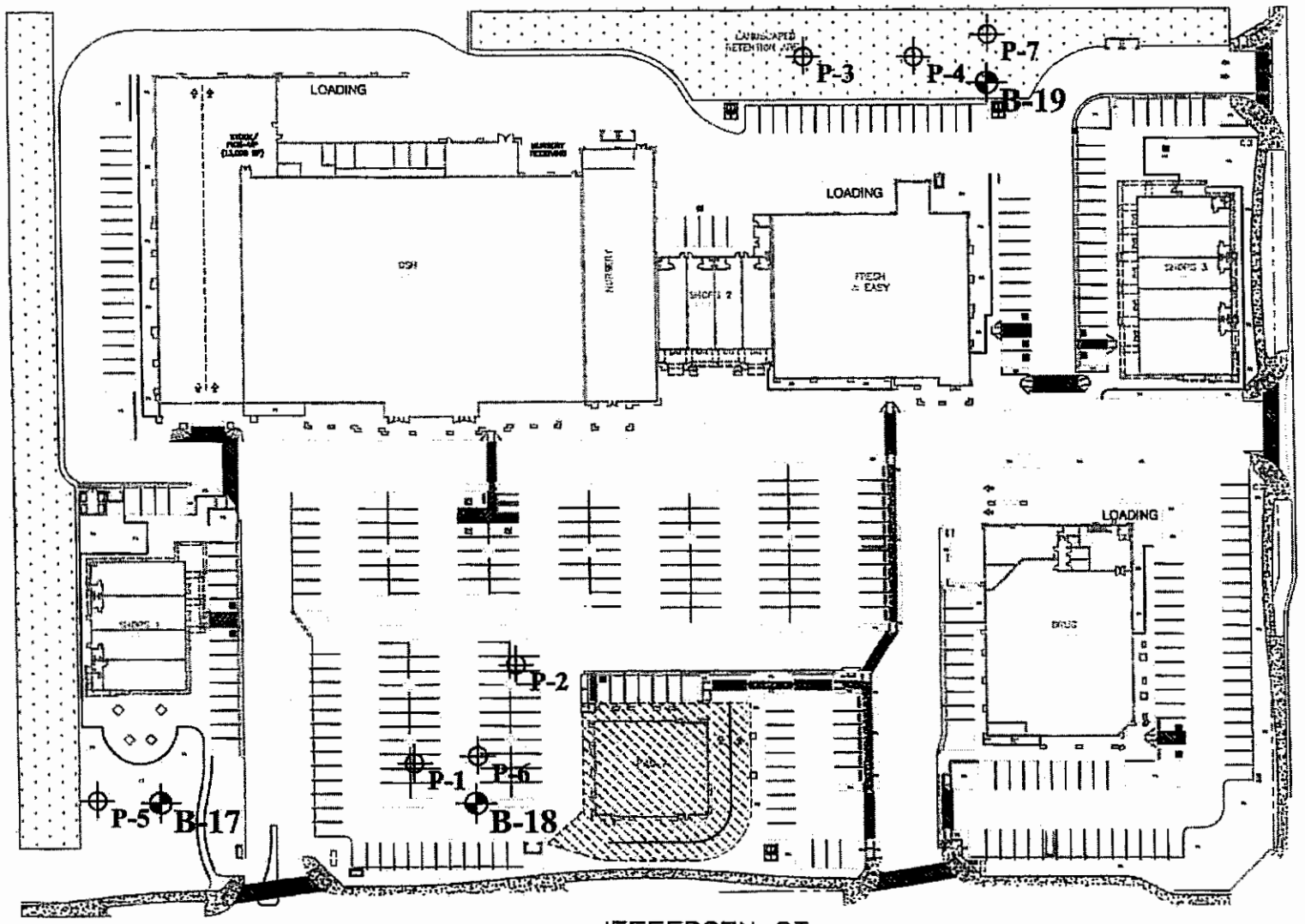
Christopher Robinson, P.G.
Project Geologist
PG No. 8420



James M. Kellogg, P.E.
Project Engineer
RCE No. 65092

CR/JMK:rm

Attachments: Figure 1, Site Plan
Results of Percolation Tests
Boring Logs



LEGEND

- B-18 APPROXIMATE BORING LOCATION
- P-7 APPROXIMATE PERCOLATION TEST LOCATION

PROPOSED JEFFERSON SQUARE
LA QUINTA, CA

SITE PLAN

Scale: NTS	Date: JULY 2008
Drawn by: RM	Approved by: JK
Project No. 112-07036	Figure No. 1

Krazan
SITE DEVELOPMENT ENGINEERS
Offices Serving the Western United States

Log of Drill Hole B-17

Project: Proposed Jefferson Square

Project No: 112-07036

Client: Regency Centers

Figure No.: A-17

Location: La Quinta, CA

Logged By: WP

Depth to Water>

Initial:

At Completion:

Depth (ft)	Symbol	Description	Dry Density (pcf)	Moisture (%)	Type	Blows/ft.	Water Content (%) 10 20 30 40
		Ground Surface					
0		***SILTY SAND (SM),*** fine grained, light brown, slightly moist					
2		***SILTY SAND/SAND (SM/SP),*** fine to medium grained, light brown, slightly moist					
4							
6		***SILTY SAND/SAND (SM/SP),*** fine grained, brown, slightly moist, medium dense					
8							
10		***SAND (SP),*** very fine grained, yellow-tan, slightly moist, medium dense					
12							
14		***SILTY SAND (SM),*** medium to coarse grained, tan, medium dense					
16		***SILTY SAND/SAND (SM/SP),*** fine to medium grained, light brown, slightly moist					
18							
20		***SILTY SAND/SAND (SM/SP),*** fine grained, tan-brown					
22		***SAND (SP),*** medium to coarse grained, light brown, dense					
24		***SAND (SP),*** medium to coarse grained, light brown, dense					
26		End of Borehole					
28		Total Depth = 25' No groundwater was encountered during drilling Hole backfilled with soil cuttings and tamped 06/26/08					
30							

Drill Method: Hollow Stem Auger

Drill Date: 06/26/08

Drill Rig: CME 55

Krazan and Associates

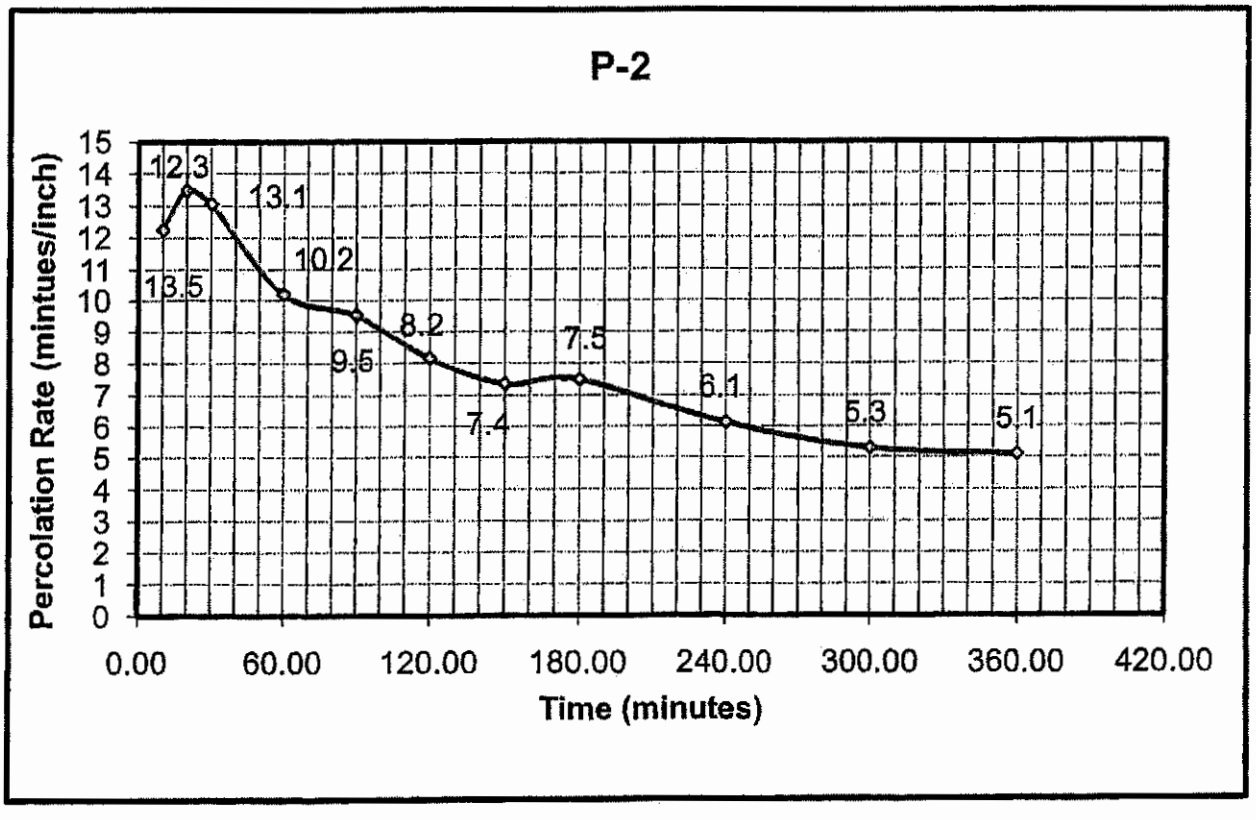
Hole Size: 6"

Driller: JG

Elevation: See Site Plan

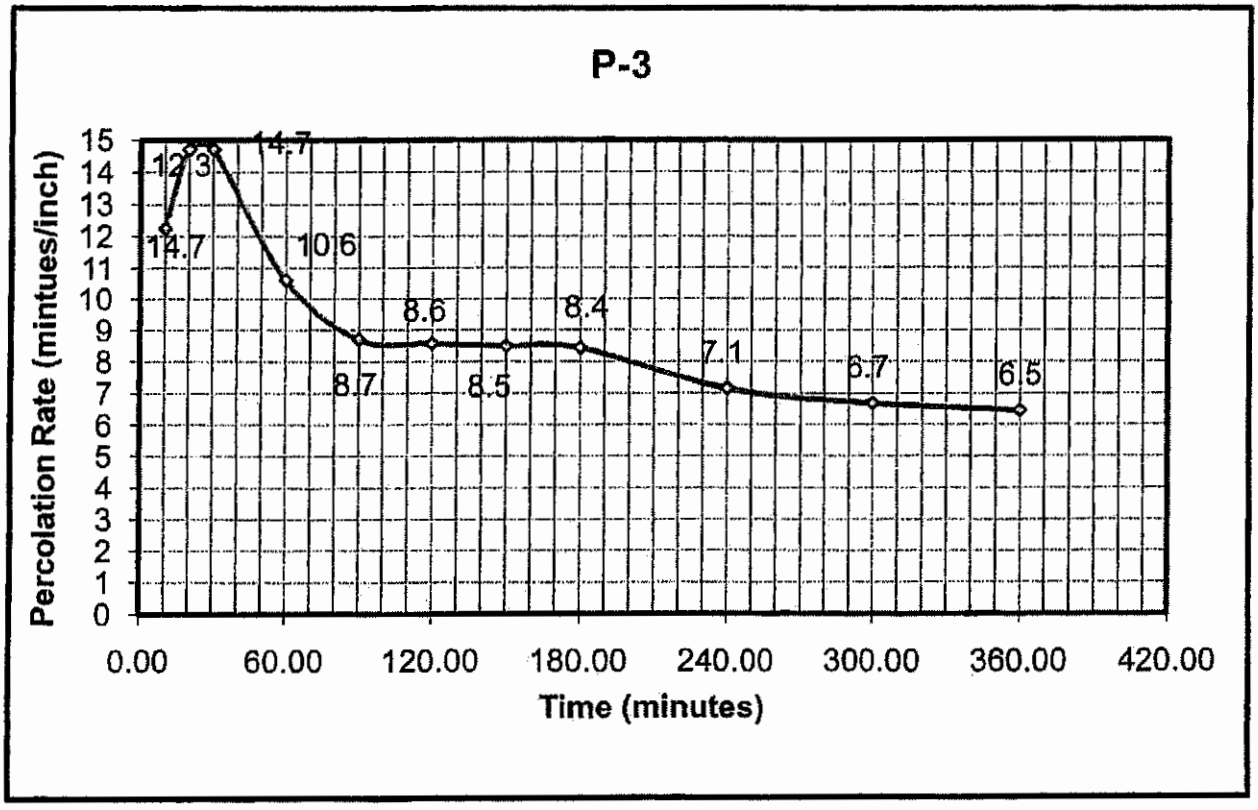
RESULTS OF PERCOLATION TESTS					
Project #	**112-07036**			**Date**	**July 3, 2008**
Project Name	Jefferson Square			**Recharges**	24 hr pre-saturated
Project Address	Jefferson Street and Fred Waring Drive				
Test No:	P-6	**Total Depth**	13 feet	**Test Size**	6 inches
Depth To Water	10 feet	**Soil Classification**	SM	**Gallons / hours**	3.75 Gals / 6 hrs

Reading	Elasped Time(min.)	Incremental Time (min.)	Gallons to keep Constant Head		Incremental Percolation Rate (in/hr)
Start	0	0.00	0.0		
2	10.00	10.00	0.3		12.3
3	20.00	10.00	0.6		13.5
4	30.00	10.00	0.8		13.1
5	60.00	30.00	1.3		10.2
6	90.00	30.00	1.8		9.5
7	120.00	30.00	2.0		8.2
8	150.00	30.00	2.3		7.4
9	180.00	30.00	2.8		7.5
10	240.00	60.00	3.0		6.1
11	300.00	60.00	3.3		5.3
12	360.00	60.00	3.8		5.1
13					
14					
15					
		Percolation Rate in Inches per Hour			**5.1**



RESULTS OF PERCOLATION TESTS					
Project #	**112-07036**			**Date**	**July 3, 2008**
Project Name	Jefferson Square			**Recharges**	24 hr pre-saturated
Project Address	Jefferson Street and Fred Waring Drive				
Test No:	P-6	**Total Depth**	13 feet	**Test Size**	6 inches
Depth To Water	10 feet	**Soil Classification**	SM	**Gallons / hours**	4.75 Gals / 6 hrs

Reading	Elasped Time(min.)	Incremental Time (min.)	Gallons to keep Constant Head		Incremental Percolation Rate (in/hr)
Start	0	0.00	0.0		
2	10.00	10.00	0.3		12.3
3	20.00	10.00	0.6		14.7
4	30.00	10.00	0.9		14.7
5	60.00	30.00	1.3		10.6
6	90.00	30.00	1.6		8.7
7	120.00	30.00	2.1		8.6
8	150.00	30.00	2.6		8.5
9	180.00	30.00	3.1		8.4
10	240.00	60.00	3.5		7.1
11	300.00	60.00	4.1		6.7
12	360.00	60.00	4.7		6.5
13					
14					
15					
	Percolation Rate In Inches per Hour				**6.5**



Enviro - Chem, Inc.
1214 E. Lexington Avenue, Pomona, CA 91766 Tel (909) 590-5905 Fax (909) 590-5907

LABORATORY REPORT

CUSTOMER: **Krazan & Associates, Inc.**
4221 Brickell St.
Ontario, CA 91761
Tel(909)974-4400 Fax(909)974-4022

PROJECT: **La Quinta**

MATRIX: SOIL
SAMPLING DATE: 12/24/07
REPORT TO: MR. SCOTT KELLOGG

DATE RECEIVED: 01/02/08
DATE ANALYZED: 01/02-03/08
DATE REPORTED: 01/04/08

SAMPLE I.D.: **112-07036 / B-1@0-3'** LAB I.D.: 080102-1

PARAMETER	SAMPLE RESULT	UNIT	PQL	DF	EPA METHOD
RESISTIVITY	2460	OHMS-CM	100000*	--	CALTRANS
SULFATE	268	MG/KG	10	1	EPA 9038
CHLORIDE	117	MG/KG	10	1	EPA 9253
pH	7.52	pH/UNIT	--	--	EPA 9045C

COMMENTS
DF = DILUTION FACTOR
PQL = PRACTICAL QUANTITATION LIMIT
ACTUAL DETECTION LIMIT = DF X PQL
MG/KG = MILLIGRAM PER KILOGRAM = PPM
OHMS-CM = OHMS-CENTIMETER
RESISTIVITY = 1/CONDUCTIVITY
* = HIGH LIMIT

DATA REVIEWED AND APPROVED BY: _____
CAL-DHS ELAP CERTIFICATE No.: 1555

Appendix F

Site Design and Treatment Control BMP Sizing Calculations and Design Details

BASIN 'A'

RETENTION BASIN SIZING (BASIN 'A')

JEFFERSON SQUARE, LA QUINTA, CA

USE DESIGN VOLUME: 52,993 CUBIC FEET

1. CON/SPAN LENGTH (INFILTRATION BASIN)

USE 5' DEEP SINGLE TRAP STANDARD STORMTRAP UNITS:

TOTAL VOLUME PROVIDED = 27,000 CF (SEE ATTACHED DETAIL BY MANUFACTURER)

2. DRYWELL

ONE MAXWELL PLUS DRYWELL, 41.3' DEEP, 34 FT BELOW WATER SURFACE AT 96" CMP STORAGE BASIN

STORAGE IN THE 6' DIA. SHAFT: VOLUME = 3.14 x (3 FT)^2 x 24' = 678 CF

STORAGE IN THE 4' DIA. SHAFT: VOLUME = 3.14 x (2 FT)^2 x 10' = 126 CF

TOTAL VOLUME = 678 SF + 138 SF = 804 SF

3. CMP PIPE

2- 5 LF 48" CMP, Volume = 10 x 3.14 x 2^2 = 126 CF

USE 96" CMP PIPE WITH TWO MANIFOLD:

REQUIRED STORAGE VOLUME = 52,993 CF - 27,000 CF - 804 CF - 126 CF =25,063 CUBIC FEET

TOTAL VOLUME PROVIDED = 25,082 CF (SEE ATTACHED EXCEL SHEET)

THEREFORE, FOOTPRINT = 95' x 52'

DRAW-DOWN TIME

TOTAL DEAD STORAGE VOLUME = 52,993 CUBIC FEET

AVG AREA = 4,648 SF, 1 DRYWELL PROPOSED

USE PERCOLATION RATE OF 2 INCH/HOUR AND 0.1 CFS PER DRYWELL:

TOTAL PERCOLATION = 4,648 SF x 1/12 x 2 INCH/HOUR x 1/ 3,600 + 1 DRYWELL x 0.1 CFS/DRYWELL
= 0.315 CFS

$$\text{DRAW TIME} = \frac{52{,}993 \text{ CUBIC FEET}}{0.315 \text{ CFS} * 3{,}600 \text{ S} / 1 \text{ HOUR}}$$

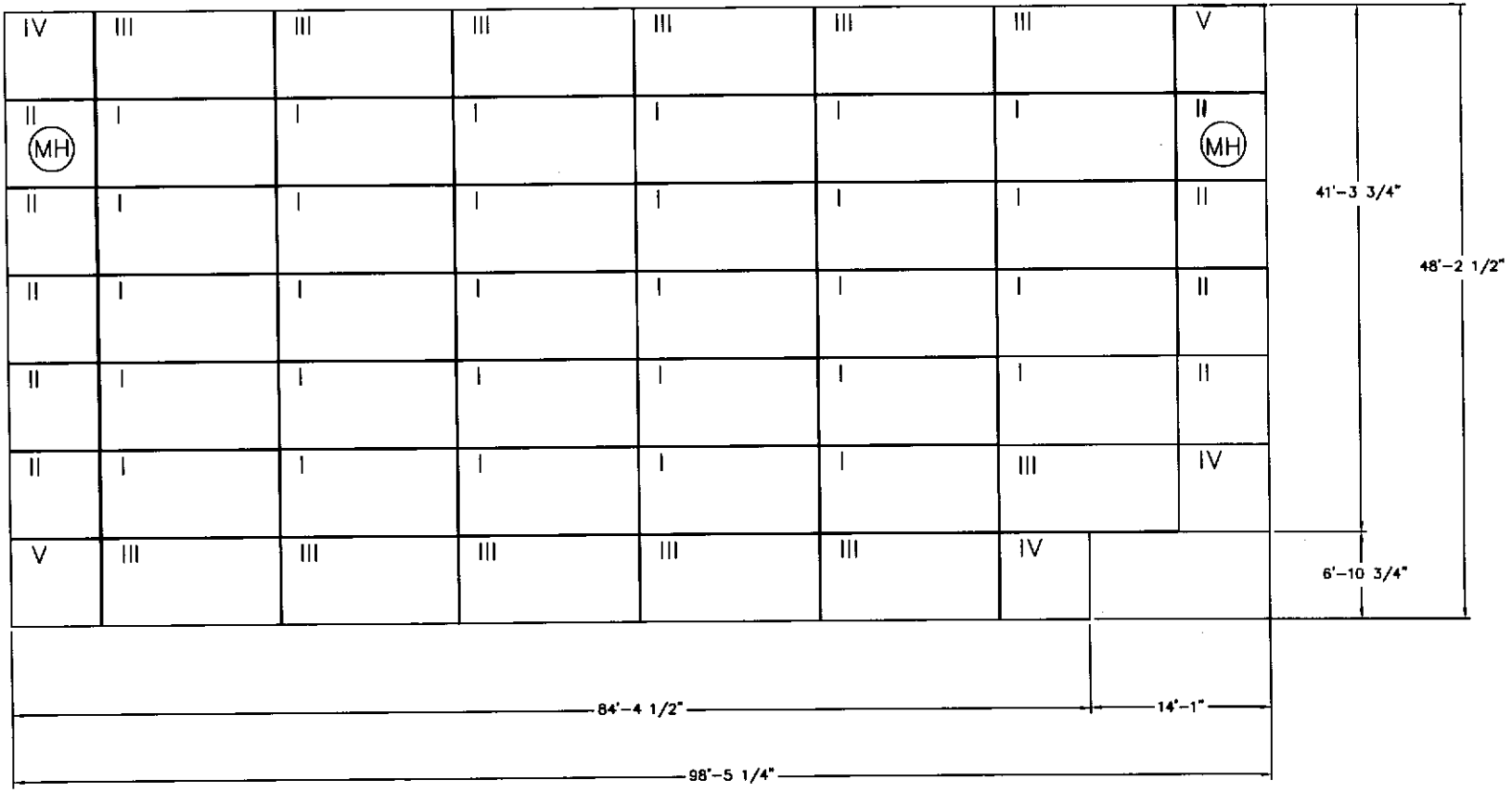
=46 HOURS (< 72 HOURS, THEREFORE, O.K.)

5'-0" DEEP STORMTRAP SYSTEM

BASIN 'A'

BILL OF MATERIALS		
QTY.	PART NO.	DESCRIPTION
29	TYPE I	5'-0" SINGLETRAP TYPE I
9	TYPE II	5'-0" SINGLETRAP TYPE II
12	TYPE III	5'-0" SINGLETRAP TYPE III
3	TYPE IV	5'-0" SINGLETRAP TYPE IV
2	TYPE V	5'-0" SINGLETRAP TYPE V
23	JOINT TAPE	JOINT TAPE - 14.5' PER ROLL
9	JOINT WRAP	JOINT WRAP - 150' PER ROLL

TOTAL VOLUME STORAGED IN CHAMBERS	= 21,253 CUBIC FEET
TOTAL VOLUME STORAGE IN STONE (40% VOID)	= 5,747 CUBIC FEET
TOTAL VOLUME PROVIDED	= 27,000 CUBIC FEET

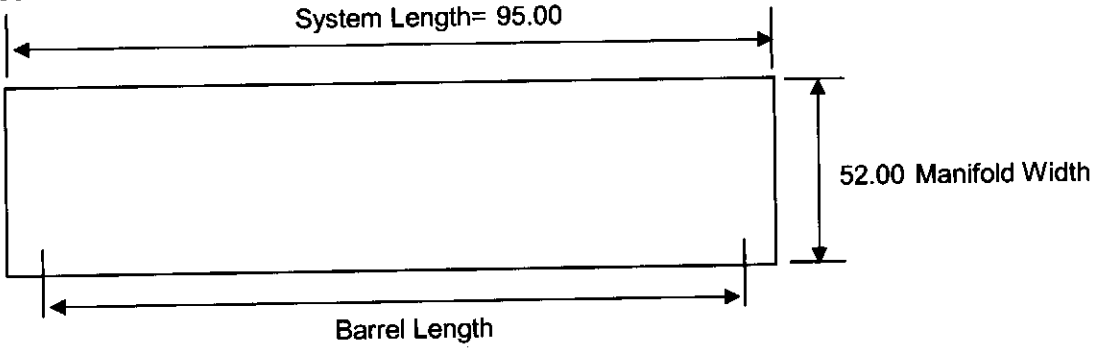


BASIN 'A'

Footprint Calculator - Underground Detention Systems

Input in Yellow				
			or	
Req'd acre-ft	0.58		Req'd cu.ft	25063.00
Target Volume	25063.00	*cu. ft.*		

# of Barrels	5	
Shape or Dia.	96	*inches*
Volume/LF	50.27	*cu. ft.*
Enter Spacing	3.00	*ft.*
Manifold Width	52.00	*ft.*
# of Manifolds	2.00	
LF of Manifolds	104.00	*ft.*
Rq. Barrel Length	78.92	
Enter Valid Length	79.00	*ft*
Total Linear Feet	499.00	*LF*
		GOOD
25082.48	cu.ft.	



Footprint Dimensions

Project ID	#6554
Sales Engineer	Jason Autry
Project Name	Wildwood Office Park
Project City	Roswell
Project State	Georgia
Customer Contact	

Notes:

CONTECH CONSTRUCTION PRODUCTS INC.
Engineering Services

Project: JEFFERSON SQUARE By: Y.H. Date: 5/28/08

Job No.: 07-304 Ckd: Date:

DETERMINATION OF BUOYANCY FORCE ON BASIN

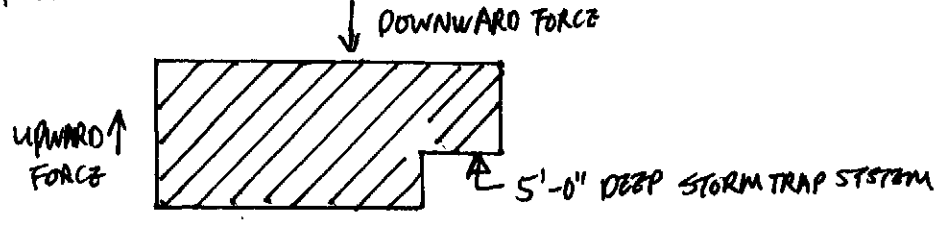
BASIN 'A':

- UNDERGROUND SYSTEM
  - 96" CMP STORAGE SYSTEM
  - 5'-0" DEEP STORMTRAP INFILTRATION SYSTEM
- ELEVATION DIFFERENCE BETWEEN THE TWO SYSTEMS = 3 FEET

A.) UPWARD BUOYANCY FORCE:

UPWARD BUOYANCY FORCE = $3' \times 2.31' = 6.93$ PSI = 998 #/CF

B.) DOWNWARD FORCE ON STORMTRAP SYSTEM:



NOT TO SCALE

- COVER OVER THE STORMTRAP SYSTEM = 12 FT.
- SOIL DENSITY = 120 #/CF

DOWNWARD FORCE = 12 FT x 120 #/CF

= 1,440 #/CF

DOWNWARD FORCE > UPWARD FORCE

∴ O.K.

DRC Development Resource Consultants

Project: JEFFERSON SQUARE
Job No: C07-304

By: Y. H. Date: 12-19-07
Ckd: Date:

DETERMINATION OF CMP STORAGE BASIN SERVICE LIFE

- BASED ON THE GEOTECHNICAL ENGINEERING INVESTIGATION FOR THE PROJECT:

Resistivity = 12,500 ohms-cm
sulfate = Less than 5 mg/kg
chloride = 23.4 mg/kg
pH = 9.02

FROM CALTRANS METHOD FOR ESTIMATING THE SERVICE LIFE OF STEEL CULVERT (SEE CHART FOR ESTIMATING YEARS TO PERFORATION OF STEEL CULVERTS & SEE ATTACHED FIGURE):

FOR pH OF ENVIRONMENT NORMALLY GREATER THAN 7.3:

$YEARS = 1.47\ R^{0.41}$, which R = RESISTIVITY IN ohm-cm

$YEARS = (1.47) \times (12,500)^{0.41}$

YEARS = 70. FOR 18 GAGE CMP STORAGE BASIN

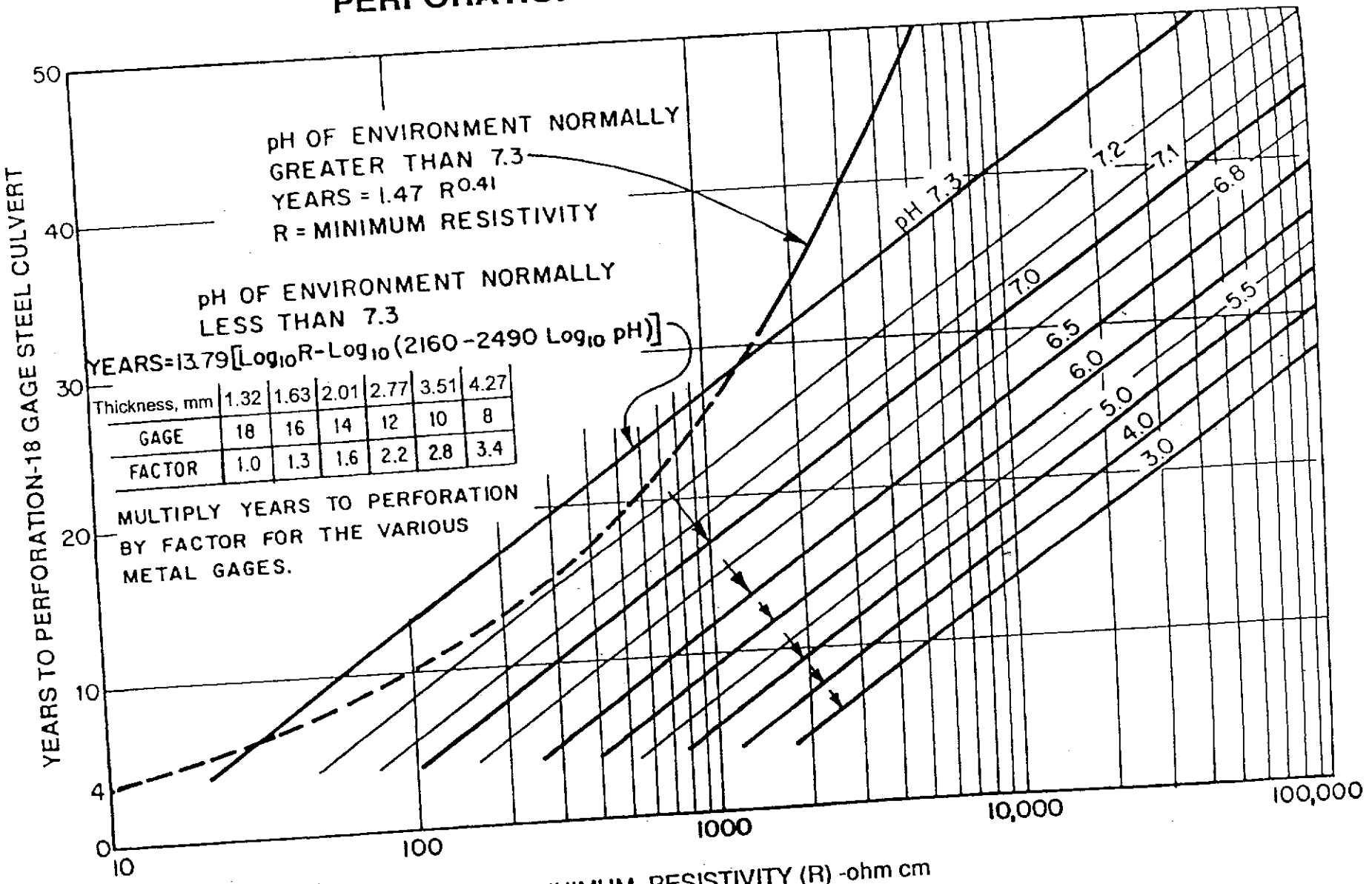
- USE 14 GAGE CMP STORAGE BASIN, BASED ON THE CHART,

FACTOR = 1.6.

$\therefore$ YEARS = 70 × 1.6 = 112

THEREFORE, THE PROPOSED 14 GAGE CMP STORAGE BASIN WILL HAVE THE LIFE EXPECTANCY OF 100 YEARS OR GREATER.

CHART FOR ESTIMATING YEARS TO PERFORATION OF STEEL CULVERTS



Thickness, mm	1.32	1.63	2.01	2.77	3.51	4.27
GAGE	18	16	14	12	10	8
FACTOR	1.0	1.3	1.6	2.2	2.8	3.4

FIGURE 1

BASIN 'B'

RETENTION BASIN SIZING (BASIN 'B')

JEFFERSON SQUARE, LA QUINTA, CA

ON-SITE RETENTION VOLUME CALCULATION
AVERAGE END AREA METHOD

Elevation (FT)	Area (SF)	Avg Area (SF)	Depth (FT)	Avg Volume (CF)
0	3,579			
		4,240	1	4,240
1	4,900			
		5,600	1	5,600
2	6,300			
		7,055	1	7,055
3	7,810			
		8,578	1	8,578
4	9,345			
		9,500	0.2	1,900
4.2	9,655			
			TOTAL (CF):	27,372

DRYWELL

ONE MAXWELL PLUS DRYWELL, 30' BELOW BASIN BOTTOM

STORAGE IN THE 6' DIA. SHAFT: VOLUME = 3.14 x (3 FT)^2 x 18' = 508 CF

STORAGE IN THE 4' DIA. SHAFT: VOLUME = 3.14 x (2 FT)^2 x 12' = 151 CF

TOTAL VOLUME PROVIDED

TOTAL VOLUME = 27,372 CF + 508 CF + 151 CF = 28,031 CF

PERCOLATION CALCULATION:

TOTAL DEAD STORAGE VOLUME = 27,010 CUBIC FEET

AVG AREA = 6,500 SF, 1 DRYWELL PROPOSED

USE PERCOLATION RATE OF 2 INCH/HOUR AND 0.1 CFS PER DRYWELL:

TOTAL PERCOLATION = 6,500 SF x 1/12 x 2 INCH/HOUR x 1/ 3,600 + 1 DRYWELL x 0.1 CFS/DRYWELL
= 0.4 CFS

DRAW TIME = $\frac{\text{27,010 CUBIC FEET}}{\text{0.4 CFS* 3,600 S / 1 HOUR}}$

=19 HOURS (< 72 HOURS, THEREFORE, O.K.)

BASIN 'C'

RETENTION BASIN SIZING (BASIN 'C')

JEFFERSON SQUARE, LA QUINTA, CA

ON-SITE RETENTION VOLUME CALCULATION
AVERAGE END AREA METHOD

Elevation (FT)	Area (SF)	Avg Area (SF)	Depth (FT)	Avg Volume (CF)
0	2,575			
		2,988	1	2,988
1	3,400			
		3,880	1	3,880
2	4,360			
		4,855	1	4,855
3	5,350			
		5,908	1	5,908
4	6,465			
		6,483	0.1	648
4.1	6,500			
			TOTAL (CF):	18,278

DRYWELL

ONE MAXWELL PLUS DRYWELL, 30' BELOW BASIN BOTTOM

STORAGE IN THE 6' DIA. SHAFT: VOLUME = 3.14 x (3 FT)^2 x 18' = 508 CF

STORAGE IN THE 4' DIA. SHAFT: VOLUME = 3.14 x (2 FT)^2 x 12' = 151 CF

TOTAL VOLUME PROVIDED

TOTAL VOLUME = 18,278 CF + 508 CF + 151 CF = 18,937 CF

PERCOLATION CALCULATION:

TOTAL DEAD STORAGE VOLUME = 17,834 CUBIC FEET

AVG AREA = 4,360 SF, 1 DRYWELL PROPOSED

USE PERCOLATION RATE OF 2 INCH/HOUR AND 0.1 CFS PER DRYWELL:

TOTAL PERCOLATION = 4,360 SF x 1/12 x 2 INCH/HOUR x 1/ 3,600 + 1 DRYWELL x 0.1 CFS/DRYWELL
= 0.3 CFS

DRAW TIME = 17,834 CUBIC FEET
0.3 CFS* 3,600 S / 1 HOUR

=17 HOURS (< 72 HOURS, THEREFORE, O.K.)

Appendix G

AGREEMENTS – CC&RS, COVENANT AND AGREEMENTS AND/OR OTHER MECHANISMS FOR ENSURING ONGOING OPERATION, MAINTENANCE, FUNDING AND TRANSFER OF REQUIREMENTS FOR THIS PROJECT-SPECIFIC WQMP

TO BE PROVIDED IN FINAL ENGINEERING PHASE

Appendix H

PHASE 1 ENVIRONMENTAL SITE ASSESSMENT – SUMMARY OF SITE REMEDIATION CONDUCTED AND USE RESTRICTIONS

N/A

Appendix I

PROJECT-SPECIFIC WQMP SUMMARY DATA FORM

Project-Specific WQMP Summary Data Form

Applicant Information	
Name and Title	Omar Hussein, Principal
Company	Beacon Realty Advisors LLC
Phone	214-923-3246
Email	omar@beaconrealtyadvisors.com
Project Information	
Project Name (as shown on project application/project-specific WQMP)	Jefferson Square Residential
Street Address	SWC of Jefferson Street and Fred Waring Drive
Nearest Cross Streets	Jefferson Street and Fred Waring Drive
Municipality (City or Unincorporated County)	La Quinta
Zip Code	92253
Tract Number(s) and/or Assessor Parcel Number(s)	Parcels 6 and 7 of Parcel Map No. 36241
Other (other information to help identify location of project)	N/A
Watershed	Whitewater River

Indicate type of project.	**Priority Development Projects (Use an "X" in cell preceding project type):**	
		SF hillside residence; impervious area ≥ 10,000 sq. ft.; Slope ≥ 25%
		SF hillside residence; impervious area ≥ 10,000 sq. ft.; Slope ≥ 10% & erosive soils
		Commercial or Industrial ≥ 100,000 sq. ft.
		Automotive repair shop
		Retail Gasoline Outlet disturbing > 5,000 sq. ft.
		Restaurant disturbing > 5,000 sq. ft.
		Home subdivision ≥ 10 housing units
	X	Parking lot ≥ 5,000 sq. ft. or ≥ 25 parking spaces

Date Project-Specific WQMP Submitted	12/08/2022
Size of Project Area (nearest 0.1 acre)	3.5 acres disturbed (13.0 acres gross)
Project Area managed with Site Design or Low Impact Development (LID) BMPs (nearest 0.1 acre)	13.0 acres
Is the project subject to onsite retention by ordinance or policy?	Yes
Are Treatment Control BMPs required?	No (pretreating before runoff enters underground chamber)
Name of the entity will implement, operate, and maintain the post-construction BMPs	Beacon Realty Advisors LLC
Contact Name	Omar Hussein
Street or Mailing Address	1844 Camino Del Mar #11
City	Del Mar
Zip Code	92014
Phone	214-923-3246
Space Below for Use by City/County Staff Only	
Preceding Information Verified by (consistent with information in project-specific WQMP)	**Name:** **Date:**
Date Project-Specific WQMP Approved:	
Data Entered by	**Name:** **Date:**
Other Comments	