

When Recorded Return To:

City Clerk  
City of Maricopa  
P.O. Box 610  
Maricopa, Arizona 85008

## AGREEMENT

**THIS AGREEMENT** (“Agreement”) is entered into this \_\_\_\_ day of \_\_\_\_\_, 2012, by the City of Maricopa, an Arizona municipal corporation (“City”) and Sonoran Creek, L.L.C., an Arizona Limited Liability Company (“Sonoran Creek”). The City and Sonoran Creek are each referred to herein individually as a “Party” and collectively as the “Parties”.

## RECITALS

A. Sonoran Creek owns the real property legally described on Exhibit A attached hereto (the “Property”).

B. The Property is affected by the existing floodplain (the “Floodplain”) without the flood control solution referenced in Recital C below.

C. Sonoran Creek has designed and engineered a flood control solution that has received a Conditional Letter of Map Revision (“Sonoran Creek CLOMR”) from the Federal Emergency Management Agency (“FEMA”) that removes the Property from the Floodplain. In order to remove the Property from the Floodplain, Sonoran Creek secured approval of flood mitigation plans by FEMA which resulted in the issuance of the Sonoran Creek CLOMR. The Sonoran Creek CLOMR requires the construction of certain flood mitigation structure(s) (the “Flood Control Structures”) within the boundaries of the Property. The Flood Control Structures are graphically depicted on Exhibit B attached hereto.

D. Pursuant to 44 C.F.R. 65.10(d), in order to qualify for the issuance of a Letter of Map Revision (“LOMR”), Sonoran Creek must assure FEMA that ultimate responsibility for maintenance of the Flood Control Structures is under the jurisdiction of a Federal or State agency, an agency created by Federal or State law, or an agency of a community participating in the National Flood Insurance Program, hereinafter referred to as the Agency.

E. The City qualifies as an Agency under the terms of 44 C.F.R. 65.10(d).

F. The primary obligation and responsibility for inspecting, maintaining, repairing and insuring the Flood Control Structures has been delegated to Sonoran Creek under this Agreement.

G. Sonoran Creek wishes to give the City assurances that it will be primarily responsible for the required maintenance of the Flood Control Structures as required by the applicable provisions of 44 C.F.R. 65.10(d), as amended from time to time.

## AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants, terms and conditions herein, the Parties agree as follows:

1. **ACKNOWLEDGEMENT OF SONORAN CREEK'S CONSIDERATION**

The City agrees that the Flood Control Structures and Sonoran Creek's execution of this Agreement satisfies any stipulations within the land entitlement approvals for the Property, or portions thereof, and the City's duty to protect the general health, safety, and welfare of the public. City agrees not to impose any stipulations or other requirements relating to the Flood Control Structures or the removal of the Property from the Floodplain in connection with the entitlements for the Property, except as may be required by FEMA. The City will not impede, condition, or otherwise interfere with the issuance of any land use entitlement approvals for the Property. Sonoran Creek acknowledges that there are a number of approvals and permits that are required as part of the Sonoran Creek project that will eventually allow the issuance of a building permit, which are specifically set forth on Exhibit C attached hereto.

2. **FLOOD CONTROL STRUCTURES MAINTENANCE PLANS**

A. **FEMA Approval of Flood Control Structures.** FEMA has reviewed and approved the construction of the Flood Control Structures and issued the Sonoran Creek CLOMR. The City acknowledges FEMA's approval of the Flood Control Structures and the Sonoran Creek CLOMR. As a qualified Agency under the terms of 44 C.F.R. 65.10(d) and based upon Sonoran Creek's assurances that it will be primarily responsible for the required maintenance of the Flood Control Structures as required by the applicable provisions of 44 C.F.R. 65.10(d), as amended from time to time, the City agrees to execute the Operation and Maintenance Plan for the Flood Control Structures ("O&M Plan"), a copy of which is attached hereto as Exhibit D and to take all steps reasonably necessary to cause FEMA to issue the LOMR for the Property in connection with the Flood Control Structures as soon as reasonably possible, and to include the Property in the LOMR when issued.

B. **Costs of O&M Plan.** Sonoran Creek, its successor and assigns, shall pay all costs for maintaining the Flood Control Structures in accordance with the O&M Plan and in compliance with all federal, state and local laws, regulations and ordinances, as amended from time to time. Sonoran Creek shall have the primary obligation and responsibility for inspecting, maintaining, repairing and insuring the Flood Control Structures until the FEMA maps depicting the flow of water to the Property no longer show flows that require the Flood Control Structures to protect development on the Property from the 100-year flood and the City has received notice ("FEMA Notice") from FEMA of such a change; provided, that the FEMA Notice is not required to specifically refer to the Property nor the Flood Control Structures.

C. **Performance Bond.** Sonoran Creek, its successors and assigns, shall obtain and maintain a performance bond in the amount of Fifteen Thousand and No/100 Dollars (\$15,000.00) ("O&M Bond") securing Sonoran Creek's obligations under this Agreement. Sonoran Creek's obligation to maintain the O&M Bond shall automatically terminate upon the City's receipt of the FEMA Notice. Upon such termination, the City agrees to promptly release the O&M Bond to Sonoran Creek. Within ninety (90) days of the expiration date, the O&M Bond will need to be replaced with a bond of similar specifications. If the City draws from the O&M Bond pursuant to Section 2(H), Sonoran Creek shall take the steps necessary to maintain the O&M Bond at \$15,000.

D. **Insurance.** Sonoran Creek, its successors and assigns, shall obtain and maintain a general liability insurance policy with limits of at least \$1,000,000 per occurrence, with a least a \$5,000,000 excess insurance policy for bodily injury and property damage issued by a State of Arizona authorized insurance company. The policy term or any renewals thereof shall remain in effect for the

term of this Agreement. Sonoran Creek shall maintain insurance which covers the Flood Control Structures against flood damage and such other risks as may be included in the broadest form of extended coverage insurance as may, from time to time, be available in an amount sufficient to insure the fair replacement cost of the Flood Control Structures in the event of a major flood or other event causing total or substantial destruction of the Flood Control Structures. The City shall be named as an additional insured under the policy and proof of insurance shall be supplied to the City on an annual basis. The insurance policy shall provide that the City be given at least thirty (30) days advance written notice of any material changes, cancellation or non-renewal notification of any policy, and in the event of such material change, cancellation or non-renewal notification, Sonoran Creek shall immediately replace said policy with another policy to the satisfaction of the City with the receipt of a certificate of insurance for such policy by the City at least ten (10) days prior to the effective date of the material changes, cancellation or non-renewal of any policy. In the event that Sonoran Creek fails to maintain the requisite insurance, the City shall have the right to immediately secure a similar insurance policy in its name with the total cost of the premium and all monies that may become due during the term of this Agreement being charged to Sonoran Creek. Sonoran Creek's obligation to maintain the insurance required under this Section shall automatically terminate upon the City's receipt of the FEMA Notice.

E. Notwithstanding the termination of Sonoran Creek's obligations under this Agreement upon the City's receipt of the FEMA Notice, Sonoran Creek shall continue to comply with all local rules and regulations regarding drainage requirements and, in the event Sonoran Creek desires to remove or modify the Flood Control Structures upon the City's receipt of the FEMA Notice, Sonoran Creek shall, at its sole cost and expense, provide the City with written certification from an Arizona licensed engineer stating that the removal or modification of the Flood Control Structures will not cause flooding or drainage issues for the surrounding properties.

F. Indemnity.

(i) Sonoran Creek shall indemnify, defend, and hold harmless the City, its officials and employees from any third party claims, demands, liabilities, losses or causes of action of any nature whatsoever arising out of the use, construction or maintenance of the Flood Control Structures or out of Sonoran Creek's activities under this Agreement, including all other acts or omissions on the part of Sonoran Creek or any person acting for or on behalf of Sonoran Creek, and from against any orders, judgments or decrees which may be entered and from and against all costs, attorneys' fees, expenses and liabilities incurred in the defense of any such claims or in the investigation thereof.

(ii) The City shall indemnify, defend, and hold harmless Sonoran Creek, its officials and employees from any third party claims, demands, liabilities, losses or causes of action of any nature whatsoever arising out of the negligent acts or omissions of City personnel or its agents entering on to, in or around the Property and/or Flood Control Structures in connection with the City's inspection of the Flood Control Structures as provided for under this Agreement, including all other acts or omissions on the part of the City or any person acting for or on behalf of the City, and from against any orders, judgments or decrees which may be entered and from and against all costs, attorneys' fees, expenses and liabilities incurred in the defense of any such claims or in the investigation thereof. In no event shall the City have any obligations under this subsection for any claims, demands, liabilities, losses or causes of action arising out of the use, construction or maintenance of the Flood Control Structures.

G. Access Easement. Sonoran Creek grants to the City and its employees, consultants and contractors, a non-exclusive easement over, upon and under the portion of the Property containing the Flood Control Structures for any and all purposes necessary for the City to inspect, maintain and restore the Flood Control Structures during the term of this Agreement. The access easement granted herein shall terminate when the FEMA maps depicting the flow of water to the Property no longer show flows that require the Flood Control Structures.

H. In the event Sonoran Creek, its successors or assigns, fails to either inspect, maintain or restore the Flood Control Structure, or any part thereof, to a safe condition satisfactory to the City in conformance with the terms hereof, the City may elect to either perform such duties with personnel from the City or contract third parties to do so, the reasonable and documented costs of which shall be (i) drawn from the O&M Bond; or (ii) if the O&M Bond is insufficient to cover the costs of such inspection, maintenance or restoration, charged to Sonoran Creek, its successors or assigns. Failure of Sonoran Creek to cover such costs within thirty (30) days after receipt of notice from the City outlining such costs, subject to applicable cure periods as provided in this Agreement, shall be considered a breach of this Agreement. Sonoran Creek, its successors or assigns, shall pay the City's reasonable attorneys' fees and costs of collection arising in any action to recover costs for restoration of the Flood Control Structures or any part thereof.

3. **ASSIGNMENT.** Except as herein specifically stated, the rights and obligations created herein run with ownership of the Property and/or portions thereof, and shall inure to the benefit of and be binding upon Sonoran Creek, the City and their respective successors and assigns. Upon transfer of the Property or a portion thereof by Sonoran Creek or subsequent owner, the new owner shall be deemed to have assumed the rights and responsibilities of Sonoran Creek hereunder or that portion of the Property that has been transferred and Sonoran Creek shall be released from this Agreement for the portion of the Property that has been transferred provided (i) Sonoran Creek or subsequent owner has given the City written notice of the assignment, which shall include the name, address and facsimile number of the new owner for notice purposes; and (ii) the new owner has agreed in writing to be subject to all of the applicable provisions of this Agreement.

#### 4. **GENERAL PROVISIONS.**

A. **Counterparts.** This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. The signature pages from one or more counterparts may be removed from such counterparts and such signature pages all attached to a single instrument so that the signatures of all Parties may be physically attached to a single document.

B. **Incorporation of Exhibits and Recitals.** All Exhibits referred to herein and the Recitals stated above are hereby incorporated by reference into this Agreement.

C. **Effective Date.** This Agreement shall become effective upon approval by the City of this Agreement during a public meeting and the full execution of the Agreement by the Parties.

D. **Cooperation.** The Parties agree to diligently and in good faith cooperate to process all applications as expeditiously as reasonably possible to take such other actions as are reasonably necessary to carry out the intent of this Agreement.

E. **Representatives.** Each Party shall designate a representative to act as a liaison between City, its various departments, and Sonoran Creek ("Representatives"). The Representatives shall be available at all reasonable times to assist with the Parties' performance under this Agreement. Either Party may change the Representative by giving notice to the other Party of the name, title, address, and telephone number of the replacement.

F. **Notices.** All notices, filings, consents, approvals and other communications provided for herein or given in connection herewith shall be in writing and delivered personally, by facsimile or sent by United States Mail in a postage prepaid envelope via certified mail, return receipt requested, addressed to the other to the address provided herein or as may be changed in writing:

“City”

City of Maricopa  
Post Office Box 610  
Maricopa, Arizona 85239  
Attn: Maricopa City Manager  
Telephone: (520) 568-9098  
Facsimile: (520) 568-9120  
Email: [brenda.fischer@maricopa-az.gov](mailto:brenda.fischer@maricopa-az.gov)

Copy to:

Maricopa City Attorney  
c/o Denis Fitzgibbons  
Fitzgibbons Law Offices  
1115 East Cottonwood Lane P.O. Box 11208  
Casa Grande, AZ 85310-0148  
Telephone: (520) 426-3824  
Facsimile: (520) 426-9355  
Email: [denis@fitzgibbonslaw.com](mailto:denis@fitzgibbonslaw.com)

“Sonoran Creek”

Sonoran Creek, L.L.C.  
5346 E Calle Del Norte  
Phoenix, AZ 85018-4449  
Attention: Michael S. Koslow  
Telephone: (602) 799-3462  
Facsimile: (602) 808-9504  
Email: [KArizona@cox.net](mailto:KArizona@cox.net)

Copy to:

William M. Koslow  
Warner Angle Hallam Jackson & Formanek,  
PLC  
2555 E. Camelback Rd.  
Suite 800  
Phoenix, AZ 85016-9925  
Telephone: (602)264-7101  
Facsimile: (602) 234-0419  
Email: [wkoslow@warnerangle.com](mailto:wkoslow@warnerangle.com)

All such notices, demands or other communications will (i) if delivered personally or delivered through a same day delivery/courier service be deemed effective upon confirmed delivery or refusal to accept delivery by the addressee, (ii) if delivered by U.S. Mail in the manner described above be deemed effective upon the earlier of receipt or five (5) business days after deposit in a United States post office or with a United States postal officer, (iii) if delivered by a recognized national overnight delivery service be deemed effective one (1) business day after deposit with such service upon confirmed delivery of refusal to accept delivery by the addressee, and (iv) if delivered by facsimile be deemed effective upon confirmation of successful transmission by the sender's facsimile machine (in each case regardless of whether such notice, demand or other communication is received by any person to whom a copy of such notice, demand or other communication is to be delivered pursuant to this Section).

G. Waiver. No delay in exercising any right or remedy by the Parties shall constitute a waiver thereof. Waiver of any of the terms of this Agreement shall not be valid unless in writing and signed by all Parties hereto. The failure of any Party to enforce the provisions of the Agreement or require performance of any of its provisions shall not be construed as a waiver of such provisions or affect the right of the Party to enforce all of the provisions of this Agreement. Waiver of any breach of this Agreement shall not be held to be a waiver of any other or subsequent breach thereof.

H. Governing Law. This Agreement shall be governed by and interpreted in accordance with the laws of the State of Arizona.

I. Choice of Forum. Any action brought to interpret, enforce or construe any provision of this Agreement shall be commenced and maintained in the Superior Court of the State of Arizona in and for the County of Pinal (or in the United States District Court for the District of Arizona, if, but only if, the Superior Court lacks or declines jurisdiction over such action). The Parties irrevocably consent to jurisdiction and venue in such courts for such purposes and agree not to seek transfer or removal of any action commenced in accordance with the terms of this Section.

J. Exercise of Authority. It is understood and agreed that Sonoran Creek shall not exercise any of the authority or sovereign powers of the City and shall not represent themselves as an agent(s) for the City. Nothing in this Agreement shall be construed to create any partnership, joint venture, or principal agency relationship between the Parties.

K. Recordation. The City shall record this Agreement in the official records of the Pinal County Recorder within ten (10) days after the Effective Date.

L. Conflict of Interest. This Agreement is subject to the provisions of A.R.S. § 38-511.

M. Severability of Provisions. Each term and provision of this Agreement shall be considered severable and if any term or provision of this Agreement be declared or be determined to be illegal or invalid, the validity of the remaining terms and provisions shall not be affected thereby, and said illegal or invalid term or provision shall not be deemed a part of this Agreement, notwithstanding any other provision of this Agreement to the contrary.

N. Time of the Essence. Time is of the essence to this Agreement and with respect to the performance required by each Party hereunder.

O. Further Assurances. The Parties hereto agree to do all such things and take all such actions, and to make, execute and deliver such other documents and instruments, as shall be reasonably requested to carry out the provisions, intent and purpose of this Agreement. If any approval is required of any Party in furtherance of the rights under this Agreement, such approval shall not be unreasonably delayed or withheld.

P. Amendments. No amendment shall be made to this Agreement except by written document executed by all the Parties. Within ten (10) days after the effective date of any amendment, the amendment shall be recorded with the Pinal County Recorder.

Q. Headings and Construction. The headings for the Paragraphs and sub-paragraphs of this Agreement are for convenience and reference purposes only and in no way define, limit or describe the scope or intent of said Paragraphs or sub-paragraphs nor in any way affect interpretation of this Agreement. When used herein, the terms “include” or “including” shall mean without limitation because of the enumeration. All grammatical usage herein shall be deemed to refer to the masculine, feminine, neuter, singular, or plural as the identity of the person or persons may require. The term “person” shall include an individual, corporation, partnership, trust, estate, or any other duly formed entity. If the last day of any time period stated herein should fall on a Saturday, Sunday, or legal holiday

in the State of Arizona, then the duration of such time period shall be extended so that it shall end on the next succeeding day which is not a Saturday, Sunday, or legal holiday in the State of Arizona. If a cross-reference within any provision cites a particular Article, Section, or Subsection number of this Agreement, it shall be a reference to the referred Article, Section, or Subsection and its subparts.

R. Attorneys Fees. In the event it becomes necessary for a Party to this Agreement to bring an action at law or other proceedings to enforce any of the terms or provisions of this Agreement, the successful Party in any such action or proceeding may apply for attorney fees pursuant to A.R.S. § 12-341.01.

S. Default. Failure or unreasonable delay by any Party to perform or otherwise act in accordance with any term or provision hereof shall constitute a breach of this Agreement and, if the breach is not cured within thirty (30) days after written notice thereof from another Party (the "Cure Period"), shall constitute a default under this Agreement; provided, however, that if the failure is such that more than thirty (30) days would reasonably be required to perform such action or comply with any term or provision thereof, then the Party shall have such additional time as may be necessary to perform or comply so long as the Party commences performance or compliance within said thirty (30) day period and diligently proceeds to complete such performance or fulfill such obligation.

T. Good Standing; Authority. Each of the Parties represents and warrants to the other (i) that it is duly formed and validly existing; (ii) that it is an entity qualified to do business in Arizona with respect to Sonoran Creek, or a political subdivision of the state with respect to the City; and (iii) that the individuals executing this Agreement, on behalf of their respective Parties are authorized and empowered to bind the Party, and the Property with respect to Sonoran Creek.

U. Force Majeure. The time period for performance and/or performance of any Party and the duration of this Agreement shall be extended by any causes that are beyond the control of the Party required to perform, such as an act of God, civil or military disturbance, delays resulting from any act or omission of governmental authorities or utilities, labor strike, injunctions in connection with litigation, labor or material shortage, or acts of terrorism.

V. Entire Agreement. This constitutes the entire agreement between the Parties pertaining to its subject matter. All prior and contemporaneous agreements, representations and understandings of the Parties, oral or written (including any term sheets, discussion outlines or similar documents), are hereby superseded and merged into this Agreement.

W. Dispute Resolution. In the event a dispute arises under this Agreement, the initiating Party shall send written notice to the other Party of the commencement of the ninety (90) day moratorium on litigation the Parties have agreed shall be instituted. During the ninety (90) day period, the Parties agree to attempt to settle the dispute through non-binding mediation before commencement of litigation. The mediation shall be held under the Commercial Mediation Rules of the American Arbitration Association ("AAA") but shall not be under the administration of the AAA unless agreed to by the Parties in writing, in which case all administrative fees shall be divided evenly between the City and Sonoran Creek. The matter in dispute shall be submitted to a mediator mutually selected by the City and Sonoran Creek. If the Parties cannot agree upon the selection of a mediator within ten (10) days, then within five (5) days thereafter, the City and Sonoran Creek shall request that the Presiding Judge of the Superior Court in and for the County of Pinal, State of Arizona, appoint the mediator. The mediator selected shall have at least ten (10) years experience in mediating or arbitrating disputes relating to commercial property. The cost of any such mediation shall be divided equally between the City and Sonoran Creek. The results of the mediation shall be nonbinding with any Party free to initiate litigation upon the conclusion of the latter of the mediation or of the ninety (90) day moratorium on litigation. The mediation shall be completed in one day (or less) and shall be confidential, private, and otherwise

governed by the provisions of A.R.S. § 12-2238, to the extent allowed by the Arizona Open Meetings Law, § 38-431 et. seq.

[Signature pages follow]



IN WITNESS WHEREOF, the Parties hereto have set their hands as of the date first written above.

THE CITY OF MARICOPA, an Arizona municipal corporation

\_\_\_\_\_  
Mayor

Dated: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Clerk/Deputy Clerk,

Approval As To Form

By: \_\_\_\_\_  
City Attorney

STATE OF ARIZONA )  
 )ss.  
County of \_\_\_\_\_ )

The foregoing Agreement was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2012 by \_\_\_\_\_, who acknowledged himself as the Mayor of the City of Maricopa, and being authorized to do so, executed the foregoing instrument on behalf of the City for the purposes therein stated.

\_\_\_\_\_  
Notary Public

My Commission Expires:

**SONORAN CREEK, L.L.C.**, an Arizona limited liability company

By: Sonoran Creek Management, L.L.C.,  
an Arizona limited liability company, its Manager

By: Desert Cedars, L.L.C., an Arizona  
limited liability company, Manager

By: \_\_\_\_\_  
Michael S. Koslow, President

By: Alta Management LLC, a Delaware  
limited liability company, Manager

By: \_\_\_\_\_  
Gary Pokoik, Member

Date: \_\_\_\_\_, 2012

STATE OF ARIZONA )  
 )ss.  
County of Maricopa )

On this \_\_\_ day of \_\_\_\_\_, 2012, before me personally appeared Michael S. Koslow,  
as President of Desert Cedars, L.L.C., an Arizona limited liability, a manager of Sonoran Creek  
Management, L.L.C., an Arizona limited liability company, the manager of Sonoran Creek, L.L.C., an  
Arizona limited liability company, being authorized to do so, and acknowledged that he signed the  
above document for the purposes therein contained.

\_\_\_\_\_  
Notary Public

My Commission Expires:

**[CALIFORNIA NOTARY PAGE FOLLOWS]**

[Insert California Notary Page]

## **LIST OF EXHIBITS**

<b>EXHIBIT A</b>	LEGAL DESCRIPTION OF THE PROPERTY
<b>EXHIBIT B</b>	GRAPHIC DEPICTION OF FLOOD CONTROL STRUCTURES
<b>EXHIBIT C</b>	APPROVAL AND PERMITS
<b>EXHIBIT D</b>	O&M PLAN

**EXHIBIT A**  
*Legal Description of the Property*

**EXHIBIT B**  
*Limits of Flood Control Structures*

**EXHIBIT C**  
*Approvals and Permits Required*

Item	Parties
Development Agreement (for guarantee of maintenance)	City and Sonoran Creek
Inter Governmental Agreement	City of Maricopa, City Council meeting
Inter Governmental Agreement	Pinal County, County Board of Supervisors
Sonoran Creek CLOMR	Pinal County (FEMA has already approved)
Approval of construction documents	City of Maricopa and Pinal County
Floodplain Use Permit	Pinal County
Dust Permit	Pinal County
Grading and Drainage and Utility permits (construction of flood control solution work would commence)	City of Maricopa
LOMR *	Pinal County and FEMA
Building Permits**	City of Maricopa

\*If Sonoran Creek was interested in an at risk building permit Pinal County and the City have agreed to review the LOMR paperwork after the construction of the Flood Control Structures is complete, including the HEC-RAS model, and allowing an at risk building permit if deemed appropriate. Sonoran Creek would have to apply for a building permit from both Pinal County and the City of Maricopa. The fees for co-permitting the project would be applicable. Since the proposed building structure would technically still be in a floodplain, the applicant would also have to apply for an additional Flood Use Permit for the structure. The certificate of occupancy would be held until the issuance of the LOMR or proof of flood insurance.

\*\*The applicant for any building structure would have to work through a parallel process to obtain any and all necessary approvals and permits such as site plan approval, grading and drainage, utilities, paving, and a building permit. This process can be started immediately, and coordinated with the Sonoran Creek engineering plans.

**EXHIBIT D**  
O&M Plan

**DRAFT**

**OPERATIONS AND MAINTENANCE PLAN  
FOR  
CHANNEL  
SONORAN CREEK  
CITY OF MARICOPA, ARIZONA**

July 2, 2012

*Prepared for:*

**Sonoran Creek, L.L.C.**  
5346 East Calle Del Norte  
Phoenix, Arizona 85018  
Contact: Michael S. Koslow  
Phone: (602) 799-3462  
Fax: (602) 808-9504

*Prepared by:*

**Coe & Van Loo Consultants, Inc.**  
4550 N. 12th Street  
Phoenix, AZ 85014  
(602) 264-6831

APPROVED BY CITY OF MARICOPA

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title/Position

CVL Job Number: 01-0176001



## **1.0 PURPOSE:**

The purpose of this document is to serve as a guideline for the inspection and maintenance of the Flood Control Structures. This Operations and Maintenance Plan shall apply to the channel, culverts, and retaining walls located within the Sonoran Creek commercial development that is within the City of Maricopa, Pinal County, Arizona, as more particularly described on Exhibit A, Sonoran Creek Preliminary Grading Plans. Capitalized terms not otherwise defined herein shall have the meaning set forth in that certain Agreement between the City of Maricopa and Sonoran Creek dated \_\_\_\_\_, 2012, to which this document is attached as an exhibit.

This Operations and Maintenance Plan establishes the formal procedures that will ensure the stability, height, and overall integrity of the Flood Control Structures. This plan specifies the maintenance activities to be performed, the frequency of their performance, and the person, by name or title, responsible for their performance. The Flood Control Structures must be maintained in accordance with this officially-adopted plan.

## **2.0 LOCATION:**

The project, Sonoran Creek, is a proposed commercial site and will consist of various retail buildings, drainage facilities, and open spaces. The site is irregular in shape, consisting of approximately 18 acres. The site is currently mass graded and drains toward the north and northwest. The site is surrounded by both residential and commercial development, as more particularly described on Exhibit A.

The site is located within the limits of the City of Maricopa, Arizona, in Pinal County. Furthermore, the site is bounded by Edison Road on the north, Hathaway Avenue on the south, John Wayne Parkway on the east, and Wilson Avenue on the west. The site is located in a portion of Section 21, Township 4 South, Range 3 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

## **3.0 OWNERSHIP:**

The owner of the Flood Control Structures is Sonoran Creek. All maintenance activities will be the responsibility of Sonoran Creek. The channel, culverts, and retaining walls are located along the southern, western, and northern boundaries of the site.

The City of Maricopa and Pinal County have ultimate responsibility for public safety, and for the maintenance of public rights-of-way. As a member of the National Flood Insurance Program (NFIP), the City of Maricopa (City) has assumed ultimate responsibility for the inspection, maintenance and restoration of the Flood Control Structures. The City will have the right, without notice to Sonoran Creek, to enter the Flood Control Structures to inspect and make repairs, should it be deemed necessary to protect the public or public facilities. Should Sonoran Creek default in the inspection, maintenance and restoration of the Flood Control Structures, the City will assume responsibility for inspection, maintenance and restoration of the Flood Control Structures and shall draw funds from a posted bond, provided, however, if the bond is insufficient to cover the costs of such inspection, maintenance or restoration, such costs shall be charged to Sonoran Creek who shall cover such costs within thirty (30) days after receipt of notice from the City outlining such costs.

### **3.1. FIELD INSPECTOR QUALIFICATIONS**

The inspector reviewing and signing off on the channel inspection shall be a registered civil engineer licensed in the State of Arizona. Field inspection, photography, field surveys and monitoring shall be performed by the qualified inspector or under his/her direct supervision.

## **4.0 SONORAN CREEK FLOOD CONTROL STRUCTURES:**

The proposed Flood Control Structures are shown on the Sonoran Creek Preliminary Grading Plans, Sheet 1 of 1.

### **4.1. Description**

The proposed Sonoran Creek commercial development is located within the existing Flood Zone 'AO', with a flood depth of 1 foot. The requested floodplain revision is based on the proposed structural improvements within the site. The proposed channel is designed to intercept water at the south boundary of the site, along Hathaway Avenue. The channel will route off-site flow along the western boundary of the site. The channel has been designed with little to no slope along Edison Road, which creates a spreader basin effect. The off-site flow will overtop the channel along the north bank into Edison Road, where it will return to its historical flow path. The channel has an approximate length of 2184 feet, with an average slope of 0.25%. There are two culverts located along the channel, one where the channel turns north, north of Hathaway Avenue, and the second is along Edison Road, at the site entrance.

### **4.2. Survey Monuments**

Refer to the Topographic Data And Drainage Map for Sonoran Creek, Prepared by Coe & Van Loo Consultants, Inc, included in the Conditional Letter of Map Revision Request. An NAVD-88 benchmark has been set at 0.1 mile southeast along the Southern Pacific Railroad from the Maricopa Railroad crossing.

### **4.3. Soils Investigation**

A soils investigation for the Sonoran Creek site prior to construction is documented in the *Report on Geotechnical Investigation*, prepared by Speedie and Associates, Report #080171SA, dated April 21, 2008.

## **5.0 MAINTENANCE TOPICS:**

### **5.1. Erosion Control and Local Drainage**

Different magnitudes of erosion may occur along the embankment:

- a) Riling, or small channels forming vertically along the channel, is caused by local runoff from the roadway and landscaping, and does not affect the function or integrity of the channel.
- b) In the event that cracks occur in the concrete lining of the channel an engineer employed by Sonoran Creek will issue a repair procedure letter. A letter to be sealed and signed by the engineer will detail a repair procedure if so deemed by the engineer. The letter will reference best practices and make every effort to document where this is an accepted practice.

### **5.2. Benchmark and Grade Control**

- a) As indicated on the plans for the channel, a benchmark has been set and survey monuments have been set at three locations around site.

- b) An elevation survey shall be conducted every five years by a registered land surveyor, contracted by the Sonoran Creek. Spot elevations at the monuments located on the top of the channel shall be compared to the as-built plan elevations.
- c) The areas of the channel between the monuments should be visually inspected on an annual basis for evidence of settling, and additional elevation survey shots should be taken at any such spots.

### **5.3. Vegetation Maintenance and Control**

The portion of the channel flowing north, parallel to Wilson Avenue, and the portion of the channel acting as a spreader basin along Edison Road, is grass lined. The vegetative cover should be maintained to reduce erosion during flood events, while maintaining plant size control in order to avoid root damage.

### **5.4. Embankment Integrity**

The embankment should be monitored and address cracking of embankments to mitigate piping through the embankment or foundation, or slope instability.

### **5.5. Erosion**

- a) Areas should be monitored for the development of erosion or undercutting of the flood control structures.
- b) In the event that erosion or undercutting of the Flood Control Structures occurs, an engineer employed by Sonoran Creek will issue a repair procedure letter. The letter to be sealed and signed by the engineer will detail a repair procedure, if deemed necessary by the engineer. The letter will reference best practices and make every effort to document where this is an accepted practice.

### **5.6. Sediment Build Up**

The depth of sediment deposition in the base of the channel should be monitored. The channel has been design to weir over the northern bank along Edison Road. Based on the design, any sediment should be removed from that portion of the channel, along Edison Road between Wilson Avenue and John Wayne Parkway, including the box culvert, after a major storm event. If sediment is allowed to build up in this area, the channel could overflow back onto the site. Sediment is unlikely to build up in the upstream portion of the channel, from Hathaway Avenue north, along Wilson Avenue, and up to the east west portion along Edison Road, including the box culvert. However, if sediment does build up in this portion of the channel, it should be removed when it reaches a depth of 6 inches. This depth allows for freeboard in the channel and prevents overflow.

### **5.7. Rodent and Insect Control**

Rodents and insects may affect the integrity or function of the channel. During the visual examination, signs of activity should be looked for. A pest control service should be contacted if necessary.

### **5.8. Structural Integrity**

The condition of the erosion control walls and the box culverts should be monitored for signs of distress, sulfate attack, cracking, differential settlement, tilting, surface water ponding near the foundations, or unauthorized modifications. Close inspection of the concrete side slopes and other concrete structures may reveal cracking. Cracks should be repaired to avoid further

pipings and additional concrete damage. Inspection and repair of expansion joints must also be performed for these same reasons.

## **6.0 SUMMARY OF MAINTENANCE RESPONSIBILITIES:**

- 6.1. Stability check; visual inspection:** to occur annually by a professional civil engineer contracted by Sonoran Creek. All maintenance topics listed above in Section 5.0 should be inspected annually.
- 6.2. Height check; elevation survey:** to occur at five (5) year intervals by a professional civil engineer contracted by Sonoran Creek or a registered land surveyor contracted by Sonoran Creek. Maintenance topic 5.2, Benchmark and Grade Control should be inspected and measured at five-year intervals.
- 6.3 Overall integrity check; visual inspections:** to occur annually by the City of Maricopa Floodplain Administrator. All maintenance topics listed above in Section 5.0 should be inspected visually annually.
- 6.4 Joint Inspection.** The Parties will use their best efforts to jointly conduct the inspections required pursuant to this Section 6.0.

## **7.0 INSPECTIONS:**

It is the primary responsibility of Sonoran Creek to provide inspections and maintenance. The City and Pinal County have the right to gain access to inspect and maintain Flood Control Structures if needed. If there are any questions arising from these inspections, a registered civil engineer should be consulted for advice. Sonoran Creek shall contract with a registered civil engineer for the inspection of the embankment, and a licensed contractor for any repairs. The following inspections shall be conducted:

### **7.1. Annual Operational Inspections**

Annual inspections are designed to provide insight to the Flood Control Structures' current condition of operability. These inspections are intended to evaluate how the channel, transition zones, upstream of culverts and retaining walls, have changed from their original as-built condition. These inspections should be performed mid-year after high spring flows have subsided. Annual inspection records should be kept and maintained by Sonoran Creek. It is recommended that an effort be made for the City and the contracted professional civil engineer do joint inspections whenever possible.

### **7.2. Major Storm Event**

For this section a major storm event is defined as the channel having a flow depth of three (3) feet or more. Post-storm inspections should be performed as soon as possible after flood conditions have subsided. Although the Flood Control Structures are designed for 100-year flow conditions, they are still susceptible to damage during other flow conditions. Post-storm inspection records should be kept and maintained by Sonoran Creek. Listed below are key elements to be inspected after storm flows have subsided:

- Vegetation: high flow erosion damage.
- Earthen fill: slope and bank protection integrity, and seepage through embankment face.

- Box Culverts: clogging of culverts to ensure free flowing conditions.
- Embankment crests: in event of overtopping, check that concentrated flow areas do not develop.
- Erosion: monitor the improvements for indications of erosion. At the turning points, the entire internal curve part on both sides shall be checked for erosion.
- Sediment build up: monitor the depth of sediment deposition in the base of the channel.

### **7.3. Citizen Complaints and Inquiries Directly Affecting the Flood Control Structures**

- a) Investigate area of complaint.
- b) Respond to citizen within 48 hours.
- c) Take action if the problem lies within Sonoran Creek's responsibility, or refer to proper agency.

### **7.4. Field Inspection Reports**

A field inspection report shall be completed pursuant to Sections 7.1 and 7.2, and submitted to the City within fifteen (15) days from the time that an inspection is completed.

Field inspection reports shall include:

- (1) A description of the current condition, or conditions, of the erosion control walls, box culverts, embankments, and side slopes for the entire length of the improvements. Especially note areas where erosion is, or will likely become, a problem.
- (2) A description of the existing vegetation, if any, and the loss of any vegetation, together with comments and/or recommendations regarding the need for the addition and/or removal of any vegetation which may impede the flow within the channel, or which may need to be replaced for erosion control.
- (3) Comments and/or notes, with photographs if necessary, of any damage to any culverts, irrigation pipes, utilities, etc.
- (4) Recommendations for remedial actions which are necessary for the preservation of the channel, embankments, culverts, or erosion control walls in order to serve its designated function.
- (5) Inspect, and include comments in the report, with regard to any existing utilities in, or adjacent to the Flood Control Structures, which may have been impacted by the storm event.
- (6) Inspect for sediment, silt, debris, trash, or deleterious material. Where depths of sedimentation exceed depths specified in Section 5.6, debris causes flow restrictions, or trash has accumulated, removal shall be required.

## **8.0 REFERENCES:**

1. Coe & Van Loo Consultants, Inc., *Conditional Letter of Map Revision Request*, 5th Revision: March 7, 2012.
2. Coe & Van Loo Consultants, Inc., *A.L.T.A/A.C.S.M. Land Title Survey, Sonoran Creek (original ALTA)*, September 12, 2007
3. Coe & Van Loo Consultants, Inc., *A.L.T.A/A.C.S.M. Land Title Survey, Sonoran Creek (detailed)*, June 28, 2010.
4. Speedie and Associates, *Report on Geotechnical Investigation, Sonoran Creek*, April 21, 2008.