# BISHOP CREEK WATER ASSOCIATION

Diversion Structures Rehabilitation Project

Phase 1

Fall/Winter 2017-18

# Table of Contents:

# General Information, Details, and Specifications

**Project Description**:

The project is to replace old, dilapidated, non-functioning, and uncontrolled diversions on the Bishop Creek Water Association (BCWA) Feeder Ditch (see location map). The proper function of the Feeder Ditch is critical to safe and equitable distribution of water in the west Bishop area. Some of the existing diversion boxes are 60 to 70 years old and are showing their age. Some are not or only partially functional.

**Schedule**:

Work is to be completed during the winter of 2017-18 and no later than by March 1, 2018. Work on the feeder ditch needs to be completed in one time period and as expeditiously as possible to minimize water flow fluctuations and ditch down time. Flow will be regulated by the BCWA Watermaster. He will make flow adjustments as necessary to conduct the work. The contractor's planned date for beginning of field work will be provided to the BCWA contact a minimum of two weeks prior to starting so that property owners can be notified.

**Scope of Work**:

The time schedule for the work is as described above. The job location is in west Bishop as shown on the Location Map (page 3). The work to be done is identified on the Work Schedule/Bid Sheet (page 6). Construction details are shown on pages 4 and 5. Upon completion of the work, the job sites will be left as they were found initially.

**Materials**:

Headwalls are to be constructed of 3000 psi concrete. Steel Reinforcing bars are to be either #4 or #5 bars as noted on the drawings. All steel shall be either galvanized or zinc painted. Backfill material shall be shale or some other approved comparably low permeable material. Locks for headwall locking devices will be provided by the BCWA.

**Modifications**:

Modifications to the drawings/specifications will be allowed only if presented in writing and approved in writing.

**Insurance Requirements**:

Liability insurance and workers compensation (if applicable) is required before beginning work. The limit of liability on the insurance shall be no less than $500,000. In addition, the Bishop Creek Water Association, its board of trustees and employees are to be added as additional

insured to contractor's general liability policy. A certificate of insurance (COI) will be submitted for approval to the president of the board of trustees prior to the start of any work.

**Job Walk:**

A job site visit will be made available if requested. Any questions regarding the job should be referred to the contact persons below.

**Bids:**

Bids should be returned on the Bid Sheet attached (page 6) signed and dated. A bidder may bid on all or part of the project as broken down on the Bid Sheet (i.e., provide a bid based on column (A), (B), or (C)). Bids are due back by November 20th.

A decision on the successful bidder(s) is planned to be made by the beginning of December. Bids should be sent to the contact address below.

**References:**

References are requested to be provided with the returned bid sheet.

**BCWA Contact Information:**

For returning bids or any other mail, please send to:

Bishop Creek Water Association

P.O. Box 1273

Bishop California 93515

For questions, a request for a field visit, or to discuss the project please contact:

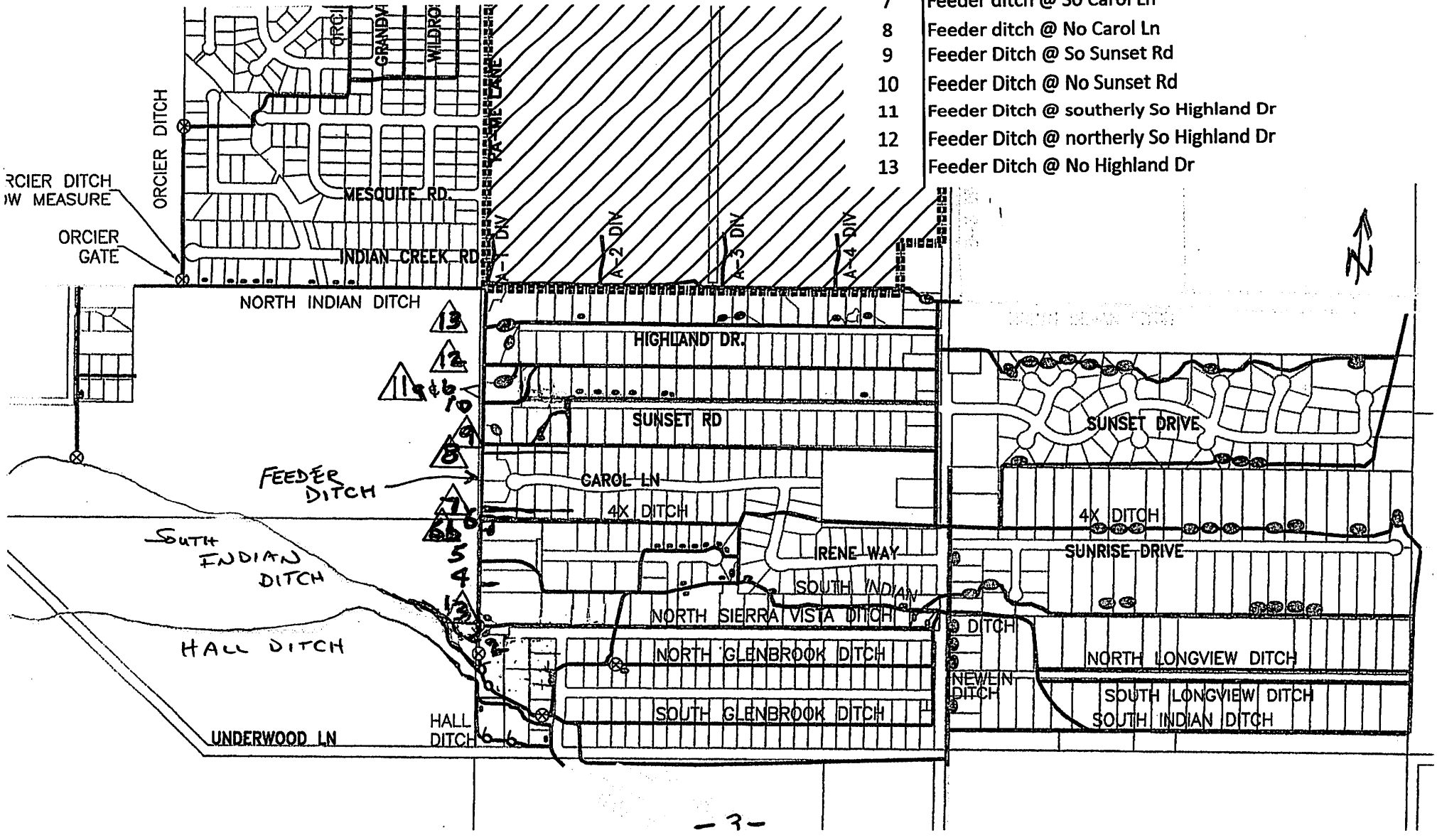
Gene Coufal @ 760 873-6209 or

Henry Means @ 760 872-6826

# BCWA Diversion Structures Needing Repair/Replacement

| Loc. # | Div Structure Location |
|---|---|
| 1 | Feeder Ditch @ So. Indian Ditch |
| 2 | So Indian Bypass gate to Feeder Ditch |
| 3 | Feeder Ditch @ Sierra Vista |
| 4 | Feeder Ditch div between Sierra Vista & Symmons Div |
| 5 | Symmons Diversion@ Feeder Ditch |
| 6 | Feeder Ditch @ 4X Ditch div |
| 7 | Feeder ditch @ So Carol Ln |
| 8 | Feeder ditch @ No Carol Ln |
| 9 | Feeder Ditch @ So Sunset Rd |
| 10 | Feeder Ditch @ No Sunset Rd |
| 11 | Feeder Ditch @ southerly So Highland Dr |
| 12 | Feeder Ditch @ northerly So Highland Dr |
| 13 | Feeder Ditch @ No Highland Dr |

## LOCATION MAP



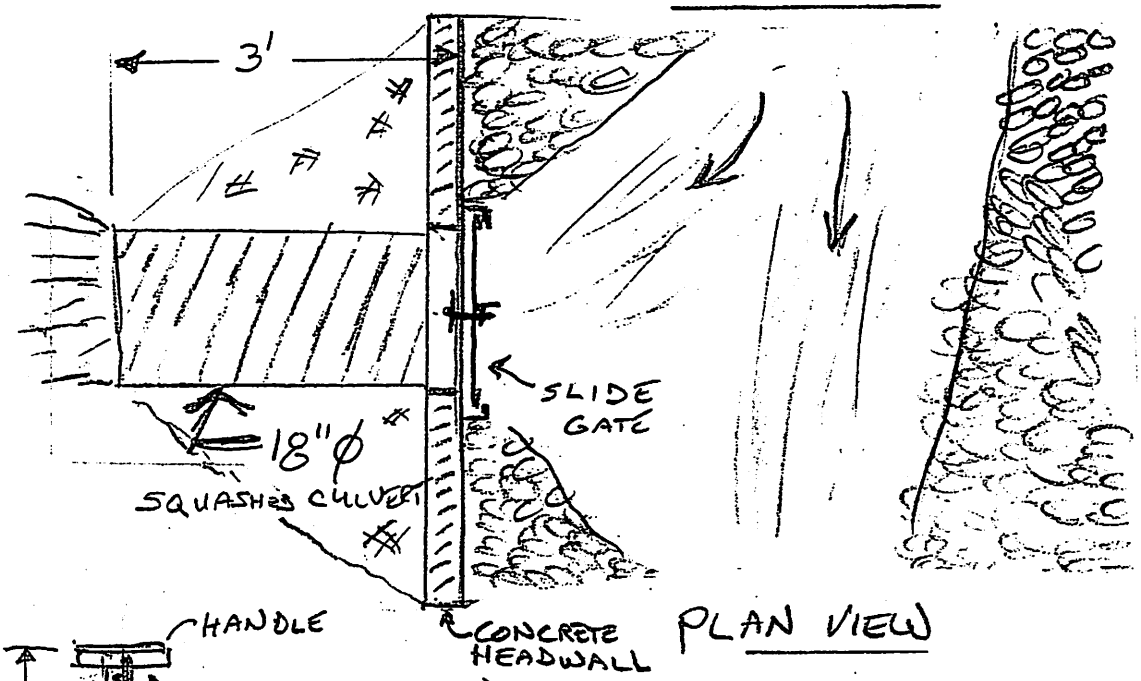
ENGINEERING DEPARTMENT

# CALCULATION SHEET

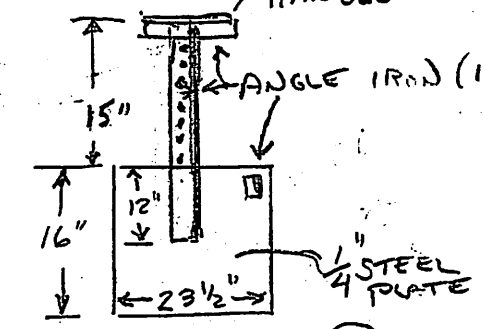
SUBJECT: NEW HEADWALL DRAWING DWG. NO.

J.O. NO. MADE BY DATE CHK. BY DATE 10/1/11

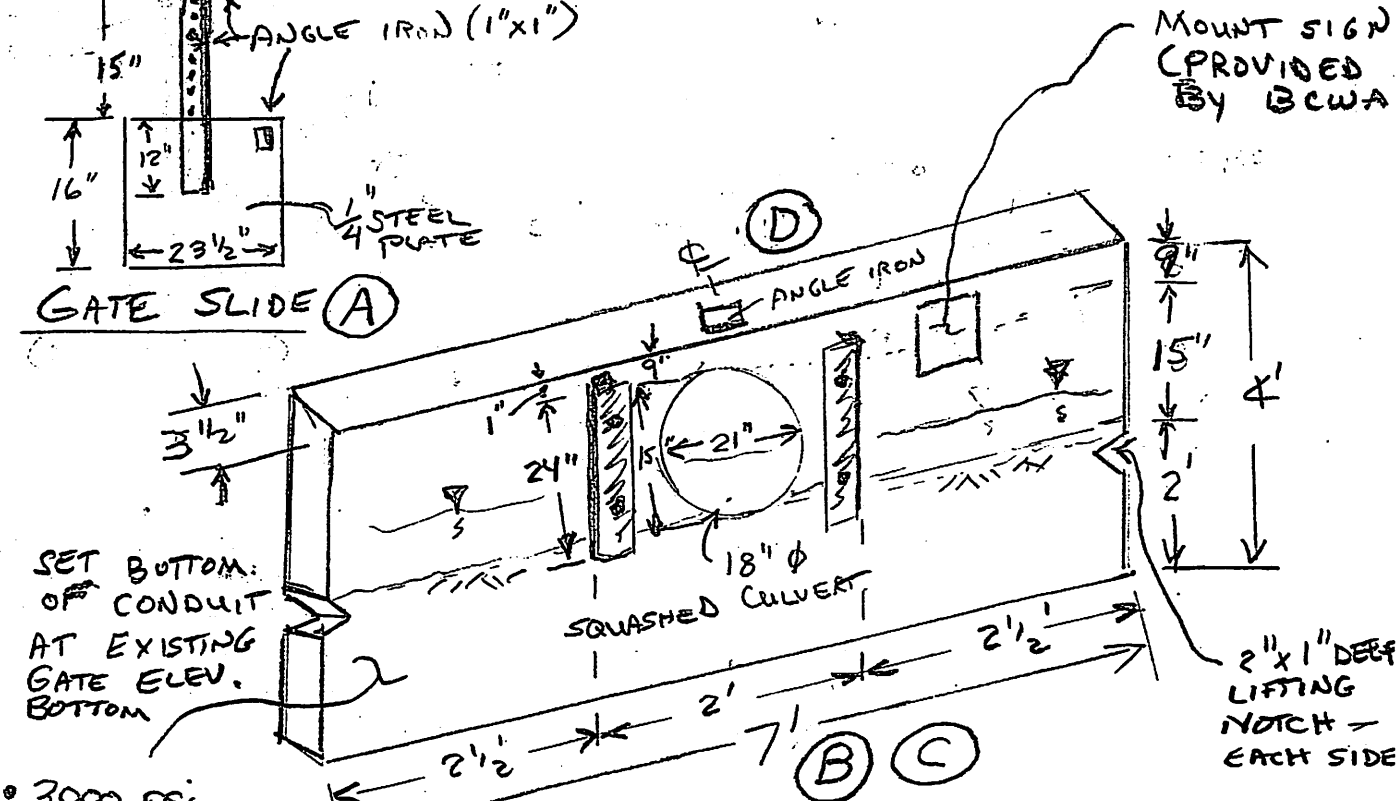
## STANDARD DIVERSION STRUCTURE HEADWALL




PLAN VIEW




GATE SLIDE (A)




- 3000 PSI CONCRETE
- #4 REINFORCING BARS (12" O.C. EACH WAY)

SECTION VIEW OF HEADWALL



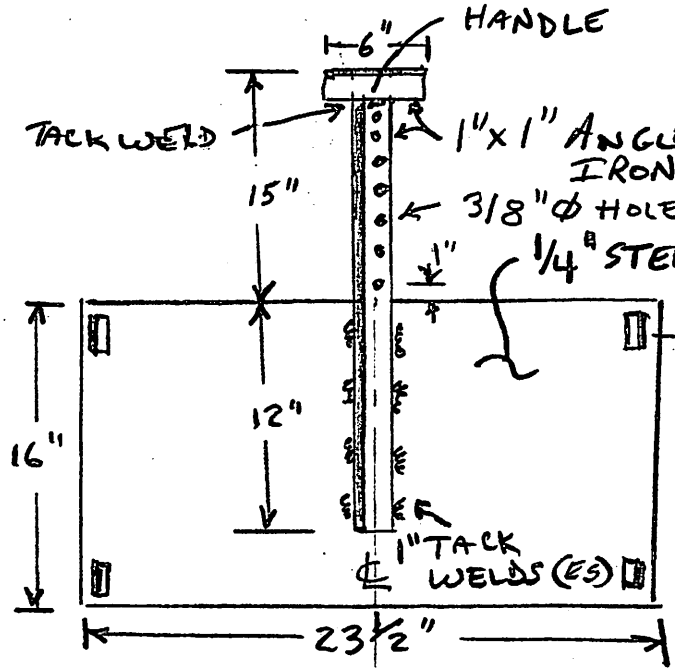
FILE DWG. NO.

ENGINEERING DEPARTMENT

# CALCULATION SHEET

SUBJECT: DIVERSION STRUCTURE DETAILS DWG. NO. DRAWING

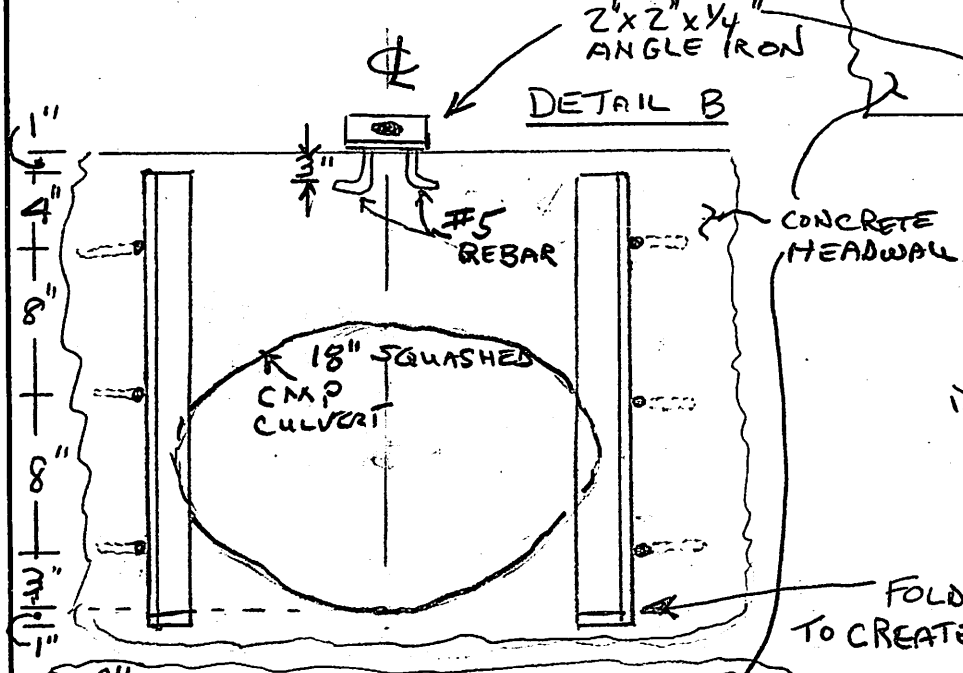
J.O. NO. _____ MADE BY _____ DATE _____ CHK. BY _____ DATE 10/1/17

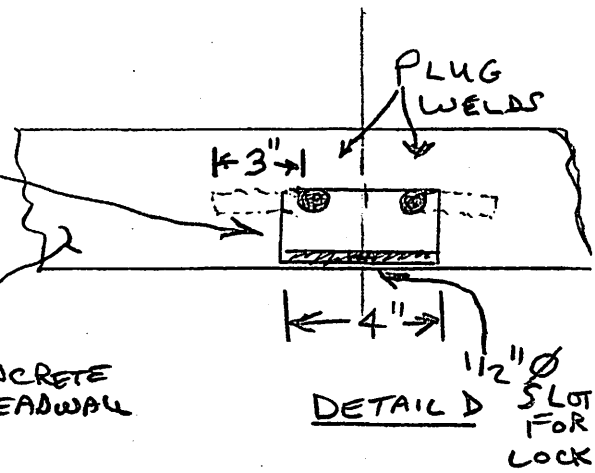



NOTES:
- LOCKS TO BE PROVIDED BY BCWA
- BACKFILL AROUND/BENEATH NEW HEADWALL WILL BE SHALE OR OTHER LOW PERMEABILITY MATERIAL

## SLIDE GATE

## DETAIL A




## DETAIL C

NOTES:
1) ALL METAL EITHER GALVANIZED OR ZINC PAINTED
2) CONCRETE FINISH TO BE SMOOTH TO CREATE SEAL WITH SLIDE GATE.



FILE DWG. NO. Fur

# BCWA Diversion Structures Needing Repair/Replacement - Phase I

## Work Schedule & Bid Sheet

| Loc. # | Div Structure Location | Work required by Contractor | (A) Cost To Construct Headwall/ Devices | (B) Cost To To Abandon, Prep Site, and Install | (C) Cost to Complete (A) & (B) |
|---|---|---|---|---|---|
| 1 | Feeder Ditch @ So. Indian Ditch | None | | | |
| 2 | So Indian Bypass gate to Feeder Ditch | None | | | |
| 3 | Feeder Ditch @ Sierra Vista | Replace diversion box per plans* | | | |
| 4 | Feeder Ditch div between Sierra Vista & Symmons Div | Make & Install a Locking Device | | | |
| 5 | Symmons Diversion@ Feeder Ditch | Make & Install a Locking Device | | | |
| 6 | 4X Diversion Box | None | | | |
| 6b | Feeder Ditch @ 4X Ditch div | Install Headwall with 4"orifice** | | | |
| 7 | Feeder ditch @ So Carol Ln | Replace diversion box per plans* | | | |
| 8 | Feeder ditch @ No Carol Ln | Replace diversion box per plans* | | | |
| 9 | Feeder Ditch @ So Sunset Rd | Replace diversion box per plans* | | | |
| 10 | Feeder Ditch @ No Sunset Rd | None | | | |
| 11 a&b | Feeder Ditch @ southerly So Highland Dr (@ 2 locations) | Make & Install 2 Locking Devices | | | |
| 12 | Feeder Ditch @ northerly So Highland Dr | Replace diversion box per plans* | | | |
| 13 | Feeder Ditch @ No Highland Dr | Replace diversion box per plans* | | | |
| | * If possible recover old structure intact | TOTAL COST | | | |

** 3' X 3' concrete headwall, with a 4"orifice, centered atnd at 1' from top, and set at exisiting elevation

Print Name

Company/Position

Signature

Date