



## URBAN DRAINAGE AND FLOOD CONTROL DISTRICT

Ken MacKenzie, Executive Director  
2480 W. 26th Avenue, Suite 156B  
Denver, CO 80211-5304

Telephone 303-455-6277  
Fax 303-455-7880  
www.udfcd.org

### MEMORANDUM

TO: Stacey Nerger,  
Town of Parker

FROM: Richard G. Borchardt, Project Manager, Stream Services

SUBJECT: Approval of Design Trails at Crowfoot SUB 17-039

DATE: July 10, 2018

The construction plans and specifications for Trails at Crowfoot SUB 17-039 dated April 2017, are hereby approved. The project will be eligible for District maintenance assistance upon satisfactory construction in accordance with the approved design, as determined by the District. Construction must begin within two years of the date of this memorandum, or the approval will expire. This project may require federal, state or local permits in addition to this design approval.

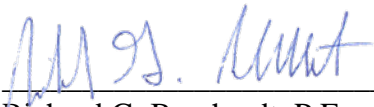
In order to facilitate observation of the proposed construction we ask that you provide the information requested below on the enclosed copy of this memorandum and return the copy to us with one set of approved construction plans and specifications as soon as possible. Half sized or electronic versions of the approved documents are preferred if readily available.

The District will follow the procedure listed below to ascertain the acceptability of the construction effort. Your assistance with this procedure will be necessary in order to qualify the project for District maintenance assistance. The District staff, or consultants retained by the District, will observe the construction.

1. The District and/or its consultant may conduct site visits during project construction as deemed necessary to observe construction for conformance with the approved plans and specifications. All grouted boulder installations must receive a pre-grout sign-off. Construction deficiencies will be reported to your contact who should take the necessary steps to have the deficiencies corrected. Such visits will not relieve you, the owner (developer) or the contractor of the obligation to construct the project in accordance with the approved design. The design consultant should maintain a construction phase presence in order to clarify the design intent, and verify construction surveys and layout.
2. Upon completion of the project, representatives from the District and/or its consultant, local public body, contractor, design consultant, and owner (developer) shall conduct a walk-through inspection of the project and shall prepare a list of deficiencies (punch list). You are responsible for arranging the inspection.

3. When the punch list items have been corrected, the local public body should notify the District, and the District representative will inspect the project again. If the project is satisfactory, written notice of acceptance of the facility for maintenance eligibility will be sent to you.
4. Grass-lined facilities will be eligible for maintenance assistance after an adequate vegetative cover has been established.
5. Changes to this approved design can only be made by use of the District's "Notice of Change to Approved Design" form (copy enclosed).

We look forward to working with you on this project.




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Richard G. Borchardt, P.E.  
Project Manager, Stream Services

Contact      Email      Phone

Local Government

Local Government Inspector

Owner (Developer)

Contractor

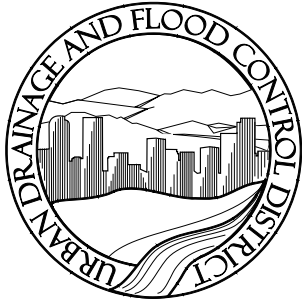
Date of Start of Construction \_\_\_\_\_

UD ID 106481

RGB/km

Enclosures: Copy of this memo  
Sample Notice of Change to Approved Design

Cc: Jacob James, Stormwater Manager for the Town of Park  
Mark Scheurer, CVL Consultants  
Raymond Pribble, UDFCD



**NOTICE OF CHANGE TO APPROVED DESIGN**

Change No. \_\_\_\_\_

Date: \_\_\_\_\_

Design Approval Date: \_\_\_\_\_

MEP ID: \_\_\_\_\_

NAME OF PROJECT: \_\_\_\_\_

Description of Change (attach appropriate drawings, specifications and calculations) made to the Approved Design:

Justification:

Impact of change on function of the facility:

APPROVALS REQUIRED:

\_\_\_\_\_  
DESIGN CONSULTANT  
\_\_\_\_\_  
CONTRACTOR

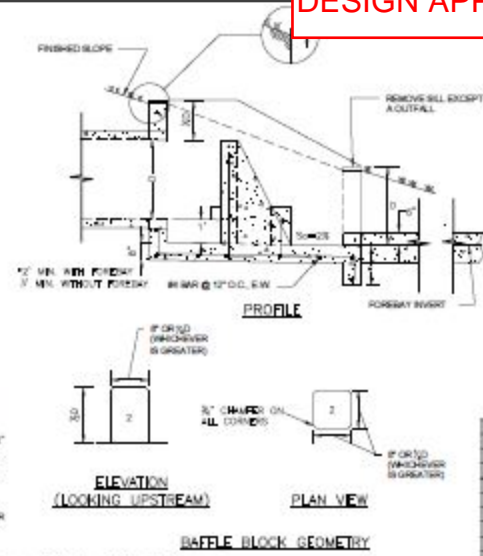
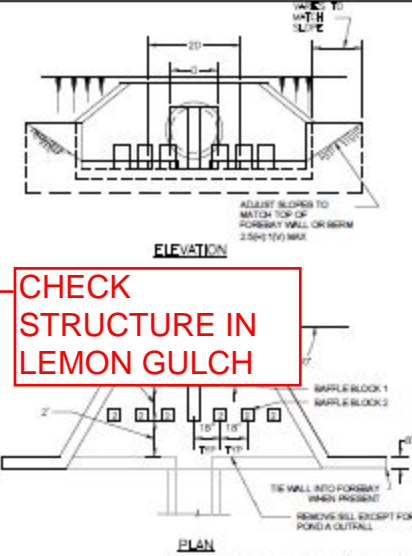
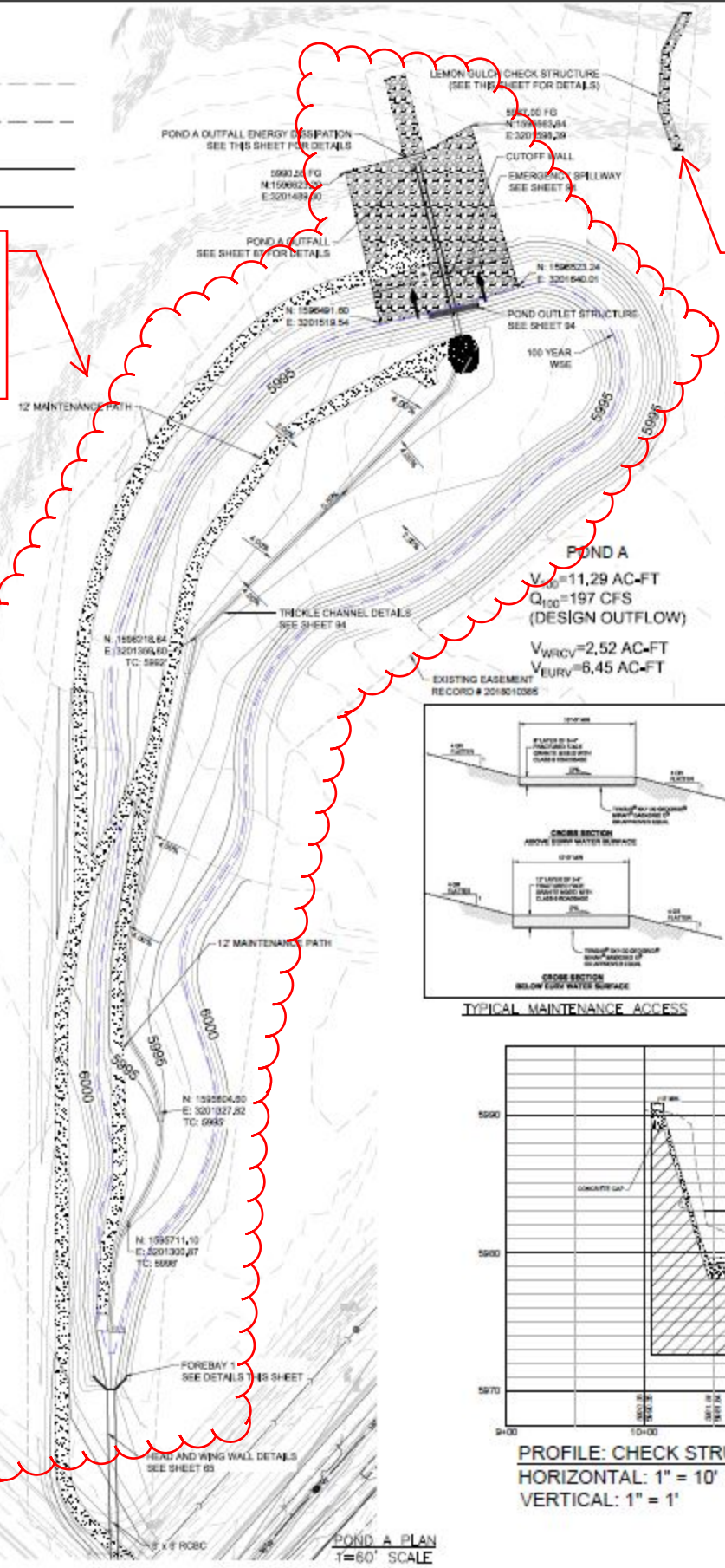
\_\_\_\_\_  
OWNER (DEVELOPER)  
\_\_\_\_\_  
LOCAL GOVERNMENT  
\_\_\_\_\_  
UDFCD

**DRAINAGE LEGEND**

EXISTING MAJOR CONTOURS	---
EXISTING MINOR CONTOURS	---
PROPOSED MAJOR CONTOURS	---
PROPOSED MINOR CONTOURS	---

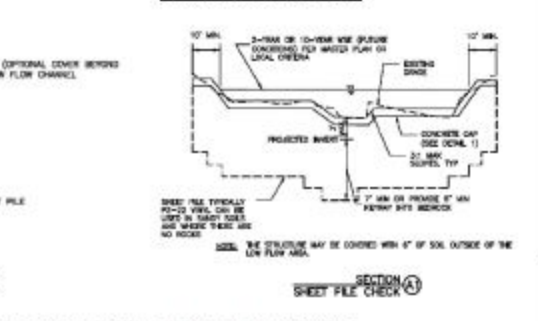
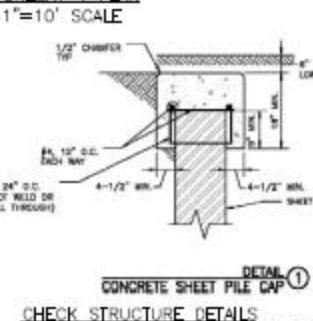
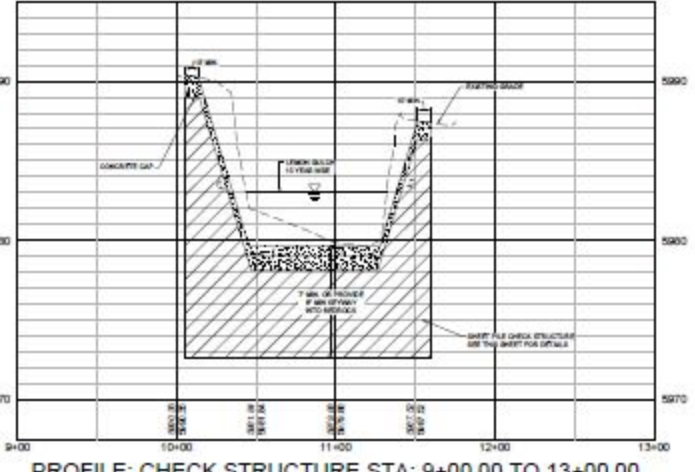
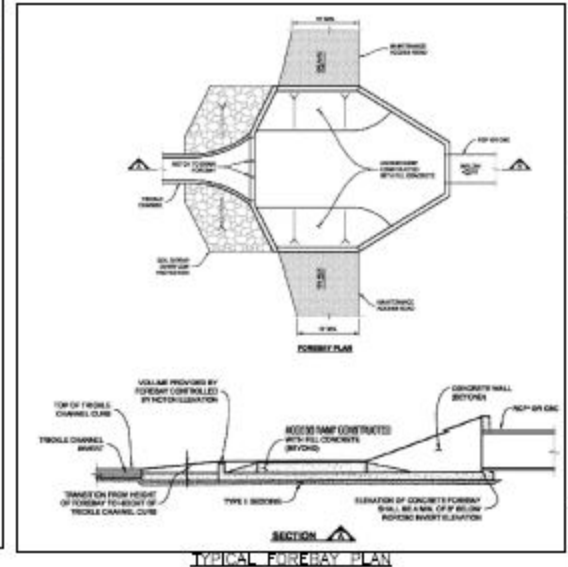
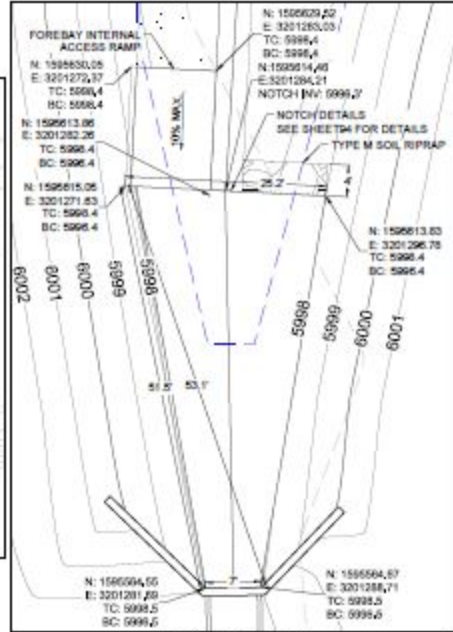
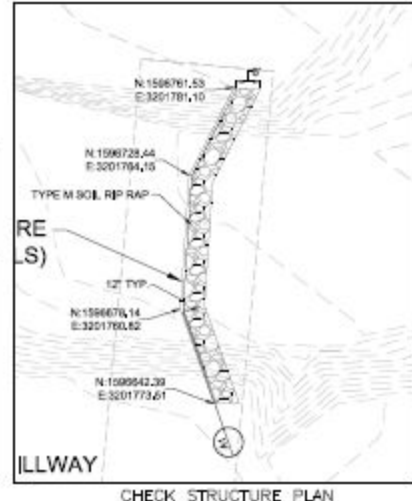
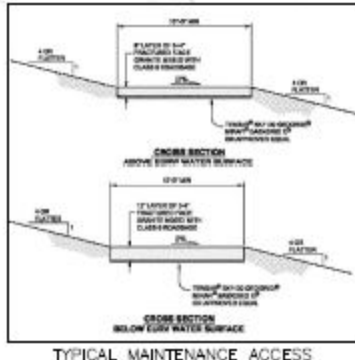
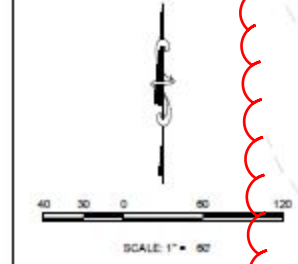
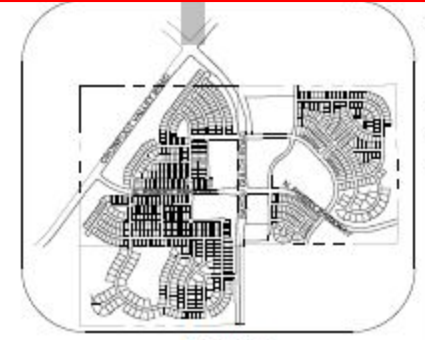
**DETENTION BASIN A FROM TRAILS AT CROWFOOT SUBDIVISION**

**CHECK STRUCTURE IN LEMON GULCH**



**ENERGY DISSIPATION FOR PONDS A, B, C & D**

FOREBAY DIAMETER (D)	BAFFLE BLOCK 1		BAFFLE BLOCK 2	
	HEIGHT (FT)	WIDTH (FT)	HEIGHT (FT)	LENGTH (FT)
1	(No energy dissipation necessary, velocity below 7 fps)			
2	3	4	2	1
3	2	3	2	1
4 (B)	3.5	4.5	3.5	1.75
4 (C)	2	3	2	1
4 (D)	3	4	3	1.5
5	2.5	3.5	3.5	1.25
6	3	4	3	1.5
7	4	5	4	2
8	3	4	3	1.5
Pond A Check	4	5	4	2



CALL 811 BEFORE YOU DIG  
 1-800-922-1987

**BENCHMARK**  
 DOUGLAS COUNTY CONTROL POINT KNOWN AS 1.06032, BEING A 3-1/4" ALUMINUM CAP, BEING LOCATED IN THE SOUTHWEST QUARTER OF SECTION 33, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, HAVING A PUBLISHED ELEVATION OF 1796.2870 METERS (5903.13 FEET) NAVD 83 DATUM.

**BASIS OF BEARINGS**  
 THE EAST LINE OF THE NORTHEAST QUARTER OF SAID SECTION 9 BEING MONUMENTED AT THE NORTHEAST CORNER OF SAID SECTION 9 BY A 3-1/4" ALUMINUM CAP STAMPED LS 20063 AND AT THE EAST QUARTER CORNER OF SAID SECTION 9 BY A 2-1/2" ALUMINUM CAP STAMPED LS 6206 BEING CONSIDERED TO BEAR SOUTH 00°15'00" EAST, 2648.70 FEET.

THE TOWN OF PARKER REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE TOWN'S STANDARDS AND APPROVED VARIANCES, SUBJECT TO THESE PLANS BEING STAMPED, SIGNED, AND DATED BY THE PROFESSIONAL ENGINEER OF RECORD. REVIEW BY THE TOWN DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN OR ACCURACY AND CORRECTNESS OF ENGINEERING CALCULATIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE ARE AFFIXED TO THIS DOCUMENT.

THIS REVIEW DOES NOT CONSTITUTE APPROVAL OF ANY PRIVATE ON-SITE IMPROVEMENTS WHICH MAY BE SHOWN. CONSTRUCTION CANNOT COMMENCE UNTIL ALL REQUIRED DRAINAGE/TRAFFIC REPORTS, FINAL DEVELOPMENT PLANS, SPECIAL REVIEWS, GRADING PERMIT, AND/OR OTHER PERMITS ARE COMPLETE, APPROVED AND ON FILE WITH THE TOWN OF PARKER.



**CVL CONSULTANTS**

10333 E. 104th Ave, Suite 300  
 Greenwood, CO 80112  
 Phone: (720) 482-6648  
 Fax: (720) 482-6648

HR 935 LLC  
 7263 South Arroyo Way  
 CENTENNIAL, CO 80112

SCALE: AS SHOWN  
 FILE NO: 8130283701  
 DATE: APR 2017

SHEET NUMBER: 93

TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE