#### Project Information - Pond A

### 1.0 General Information

A. Property Owner

# **ADD CONTACT INFORMATION**

B. Design Engineer

# ADD CONTACT **INFORMATION**

C. Project Completion Date

Phase 1 completed 2005 (included detention ponds) Phase 2 completed December-2019

### 1.1 Hydraulic Information

### A. Flow Rates-

СО	NTROL	INFLOW (CFS)	RELEASE (CFS)
W	QCV	N/A	40-hour
10-	YEAR	<i>20.78</i>	3.14
100	O-YEAR	54.04	21.50

B. Pond Description- Extended Detention Basin, earthen with concrete outlet structure and buried Rip Rap emergency overflow. There is no forbay or Micropool.

#### C. Outlet Specifications

DESCRIPTION	TYPE	VOLUME (AF)	WSEL
		0	5141.18
WQCV	ORIFICE PLATE	0.156	5142.30
10-YEAR	REC. ORIFICE	0.173	5143.20
100-YEAR	WEIR	0.324	5144.00

# 1.2 Miscellaneous Information

- Project Survey Information- Survey control information shown on drawing.
- B. Seed Mix- Boulder County, Plains Seed Mix, for specifications see:

Common Name	Species Name	Variety	%of Mix	lb/acr
Side Oats	Grama Bouteloua curtipendula	Vaughn	15%	2.74
Blue Grama	Bouteloua gracilis	Native, Alma,	20%	0.84
		or Hachita		
Buffalograss	Buchloe dactyloides	Native	<i>15%</i>	9.33
WesternWheatgrass	Pascopyrum smithii	Arriba	12.5%	3.96
WesternWheatgrass	Pascopyrum smithii	Native	12.5%	3.96
Little Bluestem	Schizachyrium scoparium	Cimarron	<i>13%</i>	1.74
		or Pastura		
Green Needlegrass	Stipa viridula	Lodorm	12%	2.31
		or Native		
		Totals:	100%	24.8

# C. Mow Area= 0.2 acres

### Section 2 - Project Notes 2.0 General Facility Description

Runoff generated from a portion of the subdivision is routed to roadside ditches and storm culverts to the pond. The water quality ponds and outlet structures are designed to detain a water quality volume, 10-year flood control volume and 100-year flood control volume. The ponds will have release rates for the WQCV, and the 10-year and 100-year rates controlled by an

# 2.1 Maintenance Notes

# A. Maintenance Frequency

Routine Maintenance typically consists of regularly scheduled mowing and trash and debris pickups for during the growing season. This includes items such as the removal of debris/material that may be clogging the outlet structure well screens and trash racks. These activities normally will be performed numerous times during the year and following significant rainfall events.

B. Equipment and Special Tools Required (Routine Maintenance) Rake or Broom

Mower Weed eater

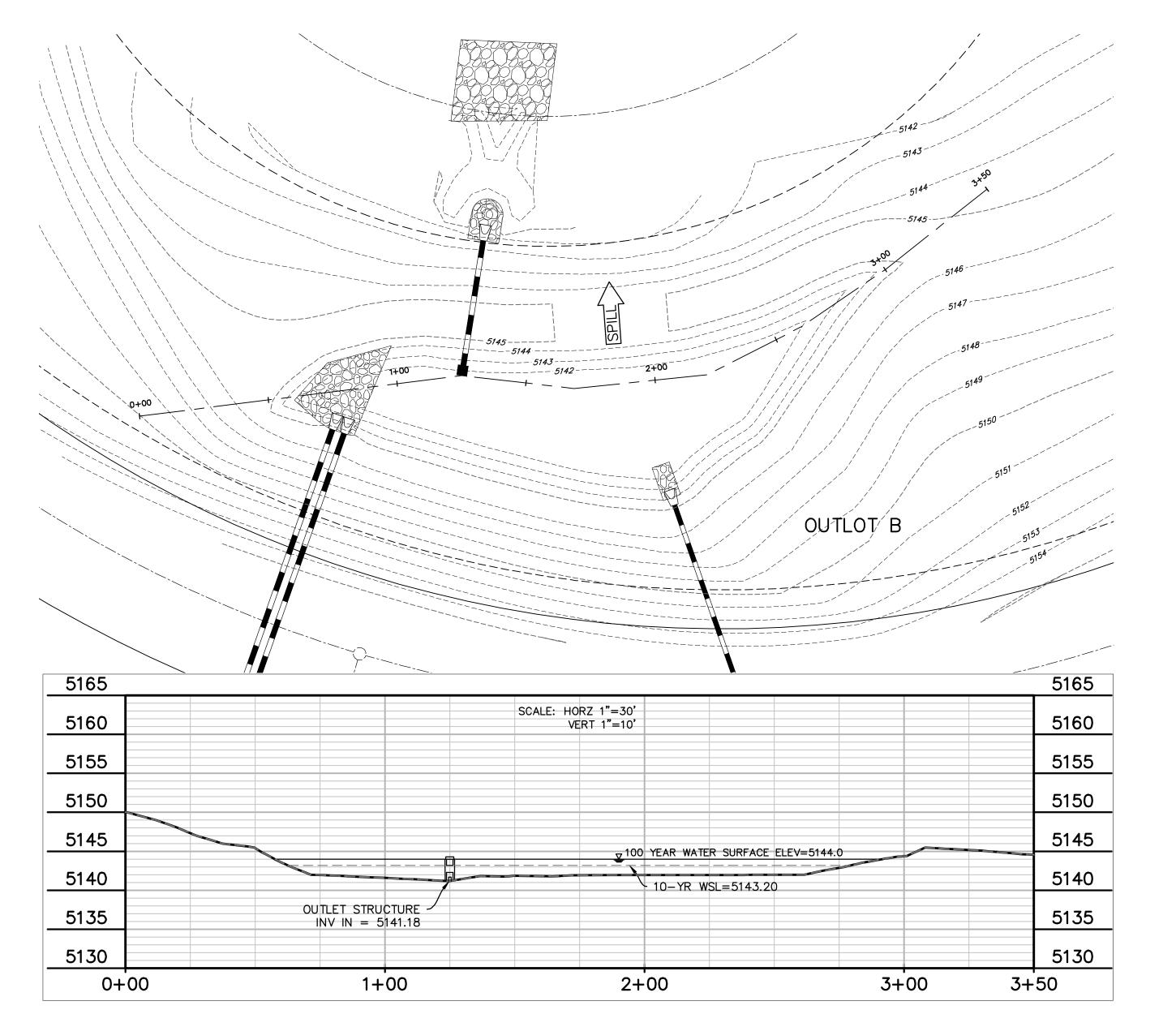
Shovel

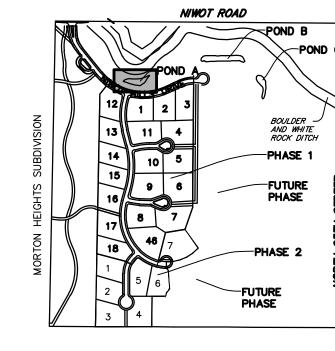
Must include at least general frequencies for routine inspections and maintenance activities in the Maintenance Notes or procedures

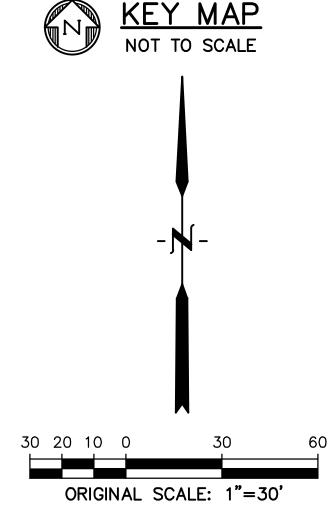
# 2.2 Maintenance Procedure

- A. Dewatering-should not be required at this facility.
- Sediment Removal- Major sediment removal (if required) consists of removal of large quantities of sediment or removal of sediment from vegetated areas. When removing large quantities of sediment typically deposited in vegetated areas. The volume of sediment removed should return the pond to design volumes and grades. The removed sediment shall be transported and disposed of.
- C. Debris Removal Debris and other materials can clog the outlet work's well screen, orifice plate(s) and trash rack. This activity must be performed anytime other maintenance activities are conducted to ensure proper
- Site Inspection- The facility should be inspected on an annual basis to evaluated the need for additional maintenance such as sediment removal, erosion control, riprap maintenance and structural repairs.
- E. Post-Maintenance Considerations- After sediment removal or repairs, the disturbed area may require
- Access to detention ponds shall be from the Niwot Hills Drive, across open space, within Outlot B, and down the 4:1 slope of the pond. No access roads are provided directly to the pond. Access shall be by the least disruptive method available for required inspection or maintenance .

O&M Plan is to be site-specific - example language only







# BASIS OF BEARINGS

THE NE 1/4 OF SECTION 32 AS BEARING S01°08'30" W PER THE RECORDED PLAT OF THIRD ADDITION TO MORTON HEIGHTS SUBDIVISION (ASSUMED MERIDIAN). **BENCHMARK** 

3-1/4" ALUMINUM CAP AT THE NORTHWEST CORNER OF SECTION 32, T2N, R69W OF THE ELEVATION=5119.30 NGVD 1929 DATUM.

**ADD DESIGN** FIRM LOGO/ **INFORMATION** , ETC. OWNER/CLIENT:

PREPARED BY:

**ADD OWNER/ CLIENT INFORMATION AND/OR LOGOS** 

ISSUE	DATE
O & M	1/29/2019
DESIGNED BY:	CWK
DRAWN BY:	CWK
CHECKED BY:	MDM
FILE NAME:	MSP01

DRAWING SCALE: HORIZONTAL: 1"=30' VERTICAL: 1"=10'

**ADD NAME AS APPROPRIATE** FOR TITLE BLOCK

DRAWING NO.

