

DAM LENGTH = 1,500 FEET
TOTAL RESERVOIR DISTURBANCE = 12.74 ACRES
RESERVOIR AREA AT HWL - 9.33 ACRES / 150.85 AC-FT
RESERVOIR AREA BELOW GRADE = 8.29 ACRES / 89.23 AC-FT
DIVERSION BERM LENGTH = 2,035 FEET
WILDLIFE FENCE LENGTH = 3,615 FEET

FILL SLOPE \ DAM

20' WIDE ARMORED
SPILLWAY

12" OUTLET PIPE

WILDLIFE FENCE
SEE NOTE #3

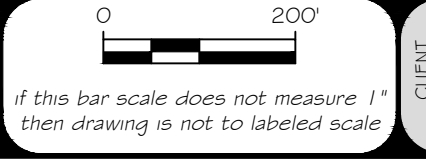
DIVERSION BERM

TOPSOIL STOCKPILE
ESTIMATED 42,000 CY



NOTES:
1. RESERVOIR WILL HAVE 12' WIDE DAM
2. DIVERSION BERM WILL BE CONSTRUCTED ABOVE ALL CUT SLOPES.
3. WILD LIFE FENCE WILL BE INSTALLED ON DIVERSION BERM AND ENCOMPASS ENTIRE RESERVOIR

REV	DATE	BY	DESCRIPTION
1			DESIGN: TRM
2			DRN: CAT
3			CHK:
4			APPD:
			DATE: 4/04/25



CLIENT
Duncan Livestock Company
Colorado

PROJECT
Duncan Livestock Company
Reservoir #3
T11N R89W Sections 25#36

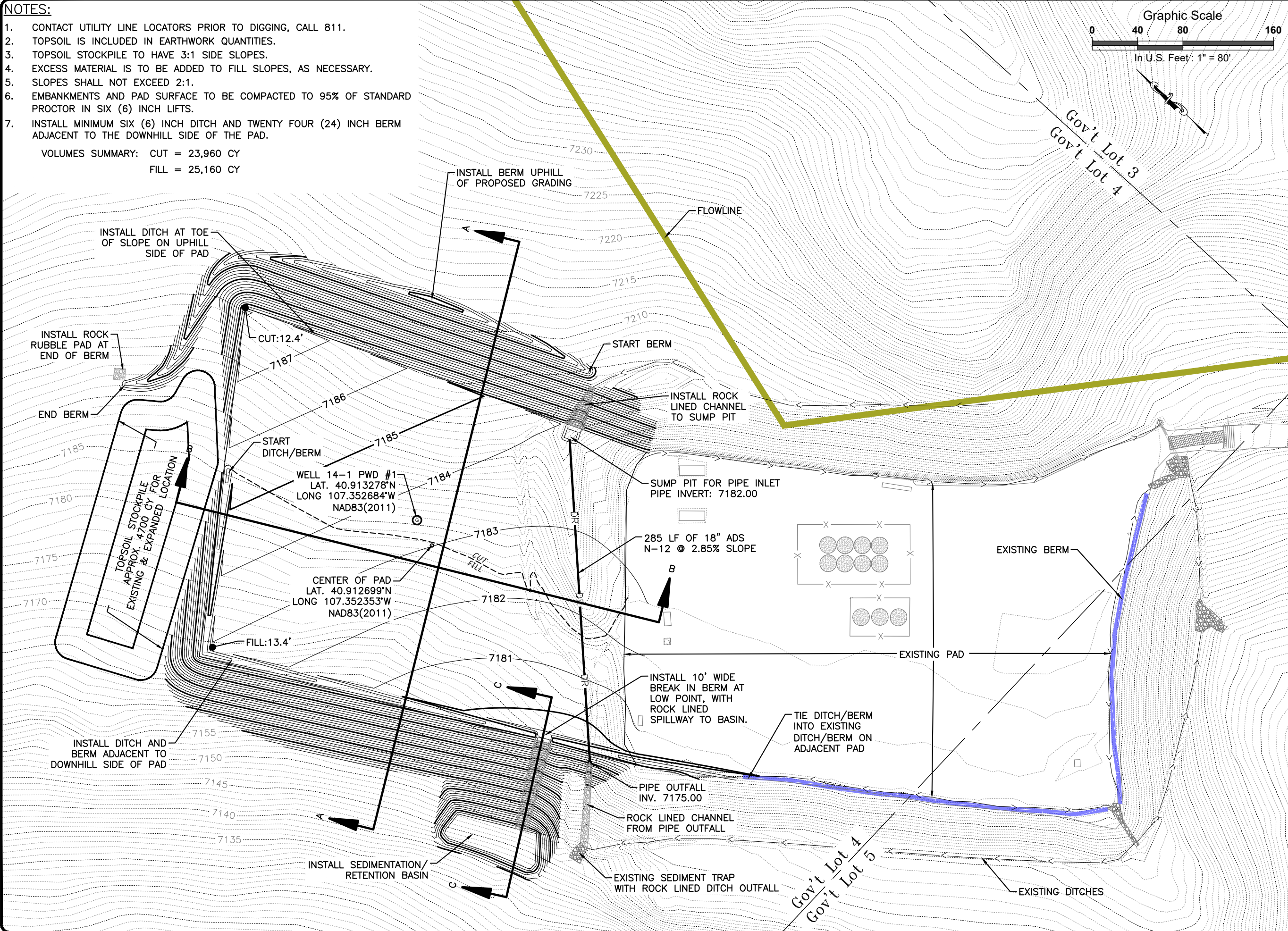
ENGINEERING

P.O. Box 1007
Gillette, WY 82717-1007
tel: (307) 682-4346
fax: (307) 682-3088

NOTES:

1. CONTACT UTILITY LINE LOCATORS PRIOR TO DIGGING, CALL 811.
2. TOPSOIL IS INCLUDED IN EARTHWORK QUANTITIES.
3. TOPSOIL STOCKPILE TO HAVE 3:1 SIDE SLOPES.
4. EXCESS MATERIAL IS TO BE ADDED TO FILL SLOPES, AS NECESSARY.
5. SLOPES SHALL NOT EXCEED 2:1.
6. EMBANKMENTS AND PAD SURFACE TO BE COMPACTED TO 95% OF STANDARD PROCTOR IN SIX (6) INCH LIFTS.
7. INSTALL MINIMUM SIX (6) INCH DITCH AND TWENTY FOUR (24) INCH BERM ADJACENT TO THE DOWNHILL SIDE OF THE PAD.

VOLUMES SUMMARY: CUT = 23,960 CY
FILL = 25,160 CY



SGM
118 West Sixth Street, Suite 200
Glenwood Springs, CO 81601
970.945.1004
www.sgm-inc.com

Petroleum Resource
Management Corp.
Duncan Facility Expansion
Lots 3, 4, 5 & 6,
Section 14, Township 11 North,
Range 89 West of the 6th P.M.
Moffate County, Colorado

Revision	Date	By
1		

Job No.	2013-379
Drawn by:	JP
Date:	3.27.25
QC:	JSS PE: JP
File:	Grading Plan

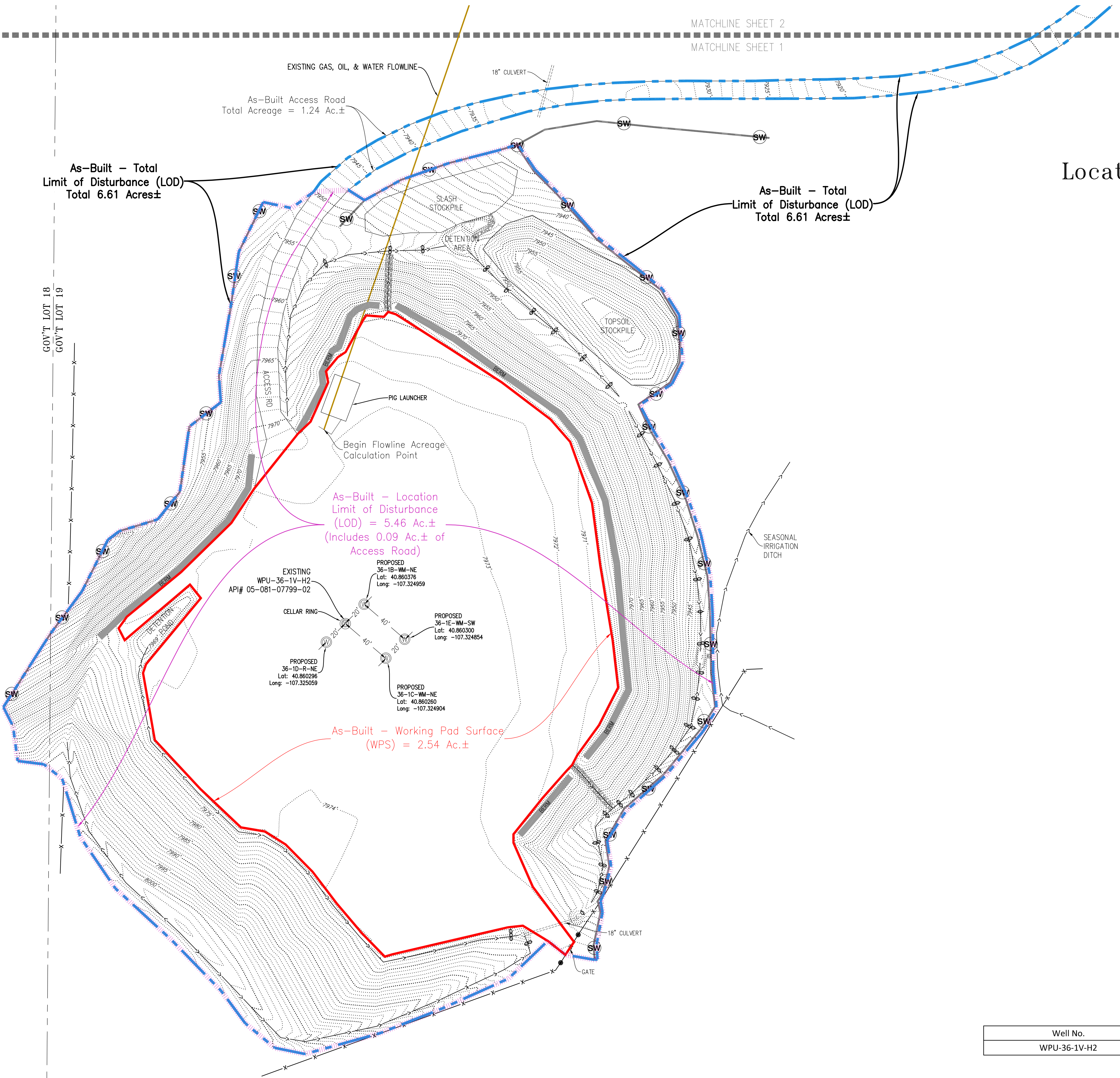
Grading Plan

Dwg No.

2

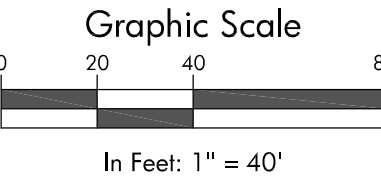
Of: 6

As-built Exhibit
Petroleum Resource Management Corp.
WPU 36-1 Location
(Formerly Duncan Ranch 11-89-36 #3-4)
Location ID: 436485
Located in Government Lot 18 & Lot 19, Section 36
T. 11 N., R. 89 W., 6th P.M.
Moffat County, Colorado



- Notes:
- This survey was performed per the clients request for an Asbuilt Survey of the area shown hereon.
 - Date of field survey: pad, equipment and well as-builts were completed on September 20, 2016; Cuttings Stockpiles removed from drawing on May 15, 2018; All facilities shown were asbuilt on October 23, 2019; Proposed Wells staked in the field on November 20, 2023.
 - Units of Linear Measurement: U.S. Survey Feet.
 - Vertical Datum: NAVD 88, based on an OPUS solution using Geoid 12A
 - WPU-36-1V Location As-Built: Associated Flowline Acreage = 34.30 Acres ±
 - Calculated based on pipeline linear footage from WPU-36-1 Location to Duncan Facility (21,345') assuming 70' width disturbance and right of way.
 - The LAT/LONG of WPU-36-1V-H2 existing well will be used as the "Approximate Center of Pad LAT/LONG".

- Working Pad Surface - 2.54 Ac.±
- Location Limit of Disturbance - 5.46 Ac.± (Includes 0.09 Ac.± of Access Rd.)
- Total Limit of Disturbance - 6.61 Ac.±
- Fenceline
- Drainage Ditch Flowline
- Straw Waddle
- Existing Gas, Oil, & Water Flowline
- Rock Check Dam
- Berm
- Rip Rap



Well As-Built Location (Approximate Center of Pad)

Well No.	NAD 83 Latitude	NAD 83 Longitude	Finished Grade Elevation	PDOP	Asbuilt Date	GPS Operator Name
WPU-36-1V-H2	40.860330	-107.325016	7974'	< 3.0	9/20/16	Mike Pinske

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Notice:
According to Colorado Law, you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any legal action based upon any defect in this survey be commenced more than ten years from the date of the certification shown hereon.

SGM
118 West Sixth Street, Suite 200
Glenwood Springs, CO 81601
970.945.1004 www.sgm-inc.com

Petroleum Resource Management Corp.
WPU 36-1 Location

#	Revision	Date	By
1	Added Asbuilt Pipe Locations	6/22/17	tab
2	Removed Cuttings Stockpile	5/15/18	tab
3	Added Asbuilt New Facilities Locations	10/28/19	db
4	Added Proposed Wells and Removed Equipment	12/15/23	ao
5	Revised Proposed Well Names	2/7/24	ao

Asbuilt Exhibit

Job No.	2013-379.001
Drawn by:	AO
Date:	3/21/2025
Approved:	lb
File:	36-1VH2_Asbuilt-2023

1
2

Ben Bader

From: Wenli Dickinson <wenli.dickinson@state.co.us>
Sent: Friday, March 21, 2025 4:53 PM
To: Ben Bader
Subject: Re: SWSP Request Duncan Livestock 308(4) April 2025 - March 2026

Ben,

I received your voicemail. I am out of the office through April 1. I anticipate being able to take a look at this SWSP sometime in April or May at the latest. It typically takes 2-3 months for us to review an SWSP request.

Thank you,

Wenli Dickinson, P.E.
Water Resource Engineer



COLORADO
Division of Water Resources
Department of Natural Resources

wenli.dickinson@state.co.us | (303) 866-3581 x8206
[1313 Sherman St, Suite 821, Denver, CO 80203](https://www.dwr.colorado.gov) | [dwr.colorado.gov](https://www.dwr.colorado.gov)
Notice: I will be out of office March 21 - April 1

----- Forwarded message -----

From: Ben Bader <Ben@lytlewater.com>
Date: Fri, Mar 14, 2025 at 11:38 AM
Subject: SWSP Request Duncan Livestock 308(4) April 2025 - March 2026
To: DWRPermitsOnline, DNR <dnr_dwrpermitsonline@state.co.us>

To Whom it May Concern,

Attached please find the SWSP request for Duncan Livestock company under CRS 308(4) for the period of April 2025 - March 2026. Also attached is a copy of the Division 6 notification as required.

Thank you for your time,

Ben Bader

Project Hydrogeologist

moore engineering, inc.

Phone: 303.350.4090 x205

12600 West Colfax Avenue, Suite A-270

Lakewood, Colorado 80215

ben.bader@mooreengineeringinc.com | www.mooreengineeringinc.com

Lytle Water Solutions is now part of Moore Engineering, Inc., a 100% employee-owned company.

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From: [Bruce Lytle](#)
To: [Chris Cooper](#)
Subject: Fw: Duncan Livestock-Cataract Creek 24CW3042
Date: Friday, May 2, 2025 2:50:12 PM
Attachments: [image001.png](#)
[Outlook-A logo of .png](#)

Here you go Chris.

Bruce A. Lytle, P.E.

Senior Project Manager

moore engineering, inc.

Cell 303.941.2077 | Direct 303.350.4090 x 201

12600 West Colfax Avenue, Suite A-270

Lakewood, Colorado 80215

bruce.lytle@mooreengineeringinc.com | www.mooreengineeringinc.com



Lytle Water Solutions is now part of Moore Engineering, Inc., a 100% employee-owned company.

From: Wenli Dickinson <wenli.dickinson@state.co.us>

Sent: Wednesday, April 23, 2025 2:05 PM

To: Bruce Lytle <Bruce@lytlewater.com>

Cc: Devon Bell <dbell@bwenergylaw.com>; Ben Bader <Ben@lytlewater.com>; Chris Fehn <Chris@lytlewater.com>; Duncan Shepherd <petromgt@comcast.net>; John Carmony <jcar75@msn.com>; Eddy Grenert <egrenert@buckeyeoilinc.com>; Miguel Suazo <msuazo@bwenergylaw.com>

Subject: Re: Duncan Livestock-Cataract Creek 24CW3042

Hi Bruce,

Yes, it is correct that water can be diverted, stored, and beneficially used under free river conditions. As I believe we also discussed on the phone, please coordinate diversions with the Division 6 office.

I talked to Ioana Comaniciu in the Denver office, and a leak test is typically required for all reservoirs. However, if you do not encounter groundwater during construction and have groundwater level data around the reservoir, you can submit that to our office to review to determine whether a leak test is required.

Thanks!

Wenli Dickinson, P.E.

Water Resource Engineer

Denver Office Team 456 Lead



wenli.dickinson@state.co.us | (303) 866-3581 x8206
[1313 Sherman St, Suite 821, Denver, CO 80203](https://www.dwr.colorado.gov) | [dwr.colorado.gov](https://www.dwr.colorado.gov)

On Wed, Apr 23, 2025 at 10:53 AM Bruce Lytle <Bruce@lytlewater.com> wrote:

Hi Wenli,

We talked last Thursday about the SWSP application and the discussion that an SWSP couldn't be approved because the type of approvals sought in the application in 24CW3042 don't meet the statutory criteria, but it is possible for operation of a reservoir consistent with 24CW3042 as long as there are free river conditions. We would like to confirm our understanding that we can operate to divert water under free river conditions, store that water in a constructed reservoir, and then put the water to beneficial use.

We will provide the notice of a non-jurisdictional water impoundment structure to the Dam Safety Branch. Since the reservoir is going to mostly be below grade, if we don't encounter any groundwater and then line the impoundment, do we still have to run the 90-day leakage test required in the 1999 design standards for lining? If we do encounter groundwater we will obtain the necessary temporary construction dewatering permit and then we understand the 90-leakage test will be required after lining.

Thank you for clarifying these issues and we would appreciate your confirmation of our understandings.

Bruce A. Lytle, P.E.
Senior Project Manager
moore engineering, inc.

Cell 303.941.2077 | Direct 303.350.4090 x 201
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Lakewood, Colorado 80215
bruce.lytle@mooreengineeringinc.com | www.mooreengineeringinc.com



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