



Fox Engineering Solutions, Inc.

September 6, 2018

Adam Tankersley
Planning/GIS
TEP Rocky Mountain, LLC
1058 County Road 215
Parachute, CO 81635

Re: GV 1-8 Well Pad – U.S. Army Corps of Engineers Nationwide Permit 12 Assessment
NE ¼ SW ¼ of Section 8, Township 7 South, Range 96 West, 6th P.M,
(Lat. 39.45084° / Long. -108.13263°) Garfield County, CO

Dear Mr. Tankersley,

As requested, Fox Engineering Solutions (“FES”) has visited and examined the existing GV 1-8 well pad located in the Riley Gulch drainage, northwest of Parachute, Colorado. FES understands that the existing well pad will be expanded to accommodate the construction of additional wells, pipelines and installation of production equipment.

As part of the proposed construction activities, the adjacent Riley Gulch drainage will be temporarily diverted through a 48” corrugated metal culvert. Additionally, a 4” produced water line and two 2” diameter condensate lines will be constructed in the access road to the well pad. The pipelines will cross Riley Gulch in the access road at the northern terminus of the GV 1-8 well pad and will also cross two unnamed ephemeral drainages in the access road located 400 ft. and 850 feet downgradient of the well pad. These activities as described in this correspondence, qualify for a U.S. Army Corps of Engineers’ Nationwide Permit #12, entitled Utility Line Activities.

The U.S. Army Corps of Engineers (Corps) issues nationwide permits (NWP) to authorize activities under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 that will result in no more than minimal individual and cumulative adverse environmental effects. For some NWPs, as with the proposed NWP #12 at the GV 1-8 well pad, the project proponents may proceed with the NWP activity as long as he or she complies with all applicable terms and conditions, including regional conditions. Other NWPs require project proponents to notify Corps district engineers of their proposed activity prior to conducting regulated activities, so that the district engineers can make case-specific determinations of NWP eligibility. (See Federal Register/Vol. 82, No. 4/ January 6, 2017/ Rules and Regulations – Issuance and Reissuance of Nationwide Permits)

The U.S. Department of the Interior, Bureau of Land Management conducted an Environmental Assessment, DOI-BLM-CO-N040-2018-0081-EA, dated September 2018, for the Upper Riley Gulch Project for Existing MV 60-8D and GV 1-8 Pads operated by TEP Rocky Mountain, LLC. The EA provides documentation to support that the proposed construction activities related to Riley Gulch complies with all applicable terms and conditions of NWP #12 including regional conditions. Based on field measurements and calculations of surface area disturbance and fills into Riley Gulch, the proposed activities comply with applicable thresholds of NWP #12.

A plat of the proposed well pad expansion is attached delineating the Riley Gulch alignment, corrugated metal culvert location and pipeline routing. Field measurements and calculations relating to drainage impacts and culvert capacity are provided along with pre-construction photographs of Riley Gulch taken approximately every 50 ft. along the culvert alignment.

As required in TEP Rocky Mountain's Storm Water Management Plan, appropriate BMPs are recommended to prevent degradation and erosion and protect the water quality of Riley Gulch.

In summary, the construction activities at the GV 1-8 well pad related to the Riley Gulch drainage meet and satisfy all applicable terms and conditions of NWP #12 including regional conditions. As such, notification to the Corps district engineer is not required.

If you have any questions or need additional information please let us know.

Respectfully submitted,



David Fox, P.E.

Fox Engineering Solutions, Inc.

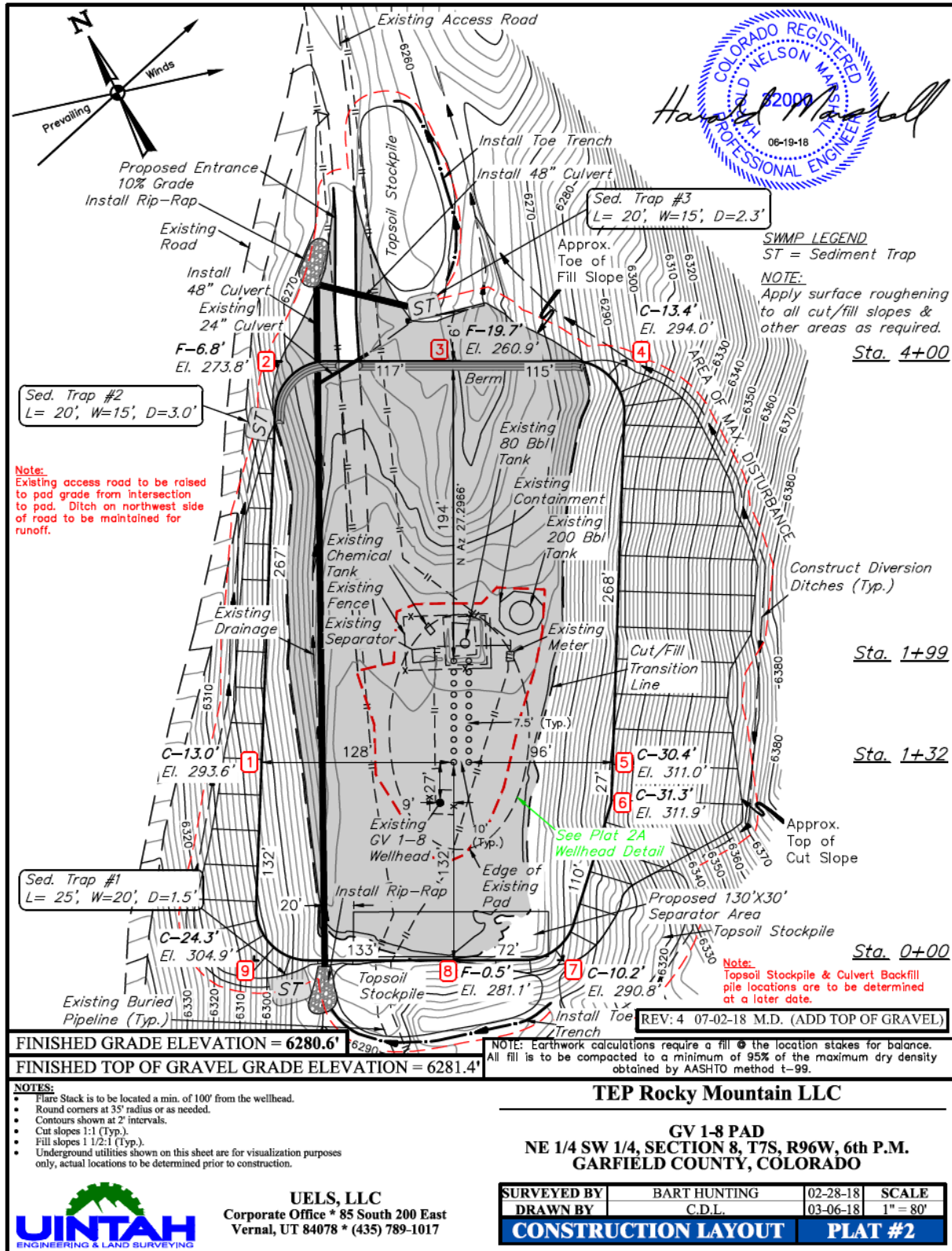
P.O. Box 413

Fruita, CO 81521

Ph: (970) 250-5505

Email: coloradofox@bresnan.net

Attachments



FINISHED GRADE ELEVATION = 6280.6'
 FINISHED TOP OF GRAVEL GRADE ELEVATION = 6281.4'

- NOTES:**
- Flare Stack is to be located a min. of 100' from the wellhead.
 - Round corners at 35' radius or as needed.
 - Contours shown at 2' intervals.
 - Cut slopes 1:1 (Typ.).
 - Fill slopes 1 1/2:1 (Typ.).
 - Underground utilities shown on this sheet are for visualization purposes only, actual locations to be determined prior to construction.

NOTE: Earthwork calculations require a fill symbol at the location stakes for balance. All fill is to be compacted to a minimum of 95% of the maximum dry density obtained by AASHTO method t-99.

TEP Rocky Mountain LLC

GV 1-8 PAD
 NE 1/4 SW 1/4, SECTION 8, T7S, R96W, 6th P.M.
 GARFIELD COUNTY, COLORADO

SURVEYED BY	BART HUNTING	02-28-18	SCALE
DRAWN BY	C.D.L.	03-06-18	1" = 80'
CONSTRUCTION LAYOUT		PLAT #2	



UELS, LLC
 Corporate Office * 85 South 200 East
 Vernal, UT 84078 * (435) 789-1017

Hydrology and Culvert Design Summary:***Tributary Flood Flow***

Drainage Basin (acres): 2640
100-year 24-hour Storm (in): 2.73
Rational C Factor: 0.4

Rational Method Peak **116**
Discharge(cfs):

Culvert Capacity:

Mannings N: 0.024
Slope: 0.04
Pipe Type: CMP
Pipe Diameter (in.): 48

Peak Capacity **167**
(cfs)

Calculations by:
Base Map By:

Fox Engineering Solutions Inc.
Unitah Engineering
 9/6/2018

US Army Corps of Engineers' Nationwide Permit Summary:

** GV 1-8 culvert & pipeline activities, as per 33 CFR Part 330, qualifies under NWP 12- Utility Lines. TEP Rocky Mountain shall comply with the USACE Nationwide Permit General and Regional Conditions, dated March 19, 2017 & January 11, 2017, respectively.*

Estimated Affected Surface Area: 0.021 acres
Estimated linear feet of drainage effected: 480 ft.

** Install culvert and BMPs per TEP Rocky Mountain's "Storm Water and 404 Handbook of Best Management Practices. Place inlet and outlet protection.*

** Field verify location of gas, water and condensate lines.*
Call Before You Dig Ph: 811

Photo 1: Riley Gulch Station 0+00 Inlet location of 48" CMP



Photo 2: Riley Gulch Station 0+50



Photo 3: Riley Gulch Station 1+00



Photo 4: Riley Gulch Station 1+50



Photo 5: Riley Gulch Station 2+00



Photo 6: Riley Gulch Station 2+50



Photo 7: Riley Gulch Station 3+00



Photo 8: Riley Gulch Station 3+50



Photo 9: Riley Gulch Station 4+00



Photo 10: Riley Gulch Station 4+50



Photo 11: Riley Gulch Station 4+80

