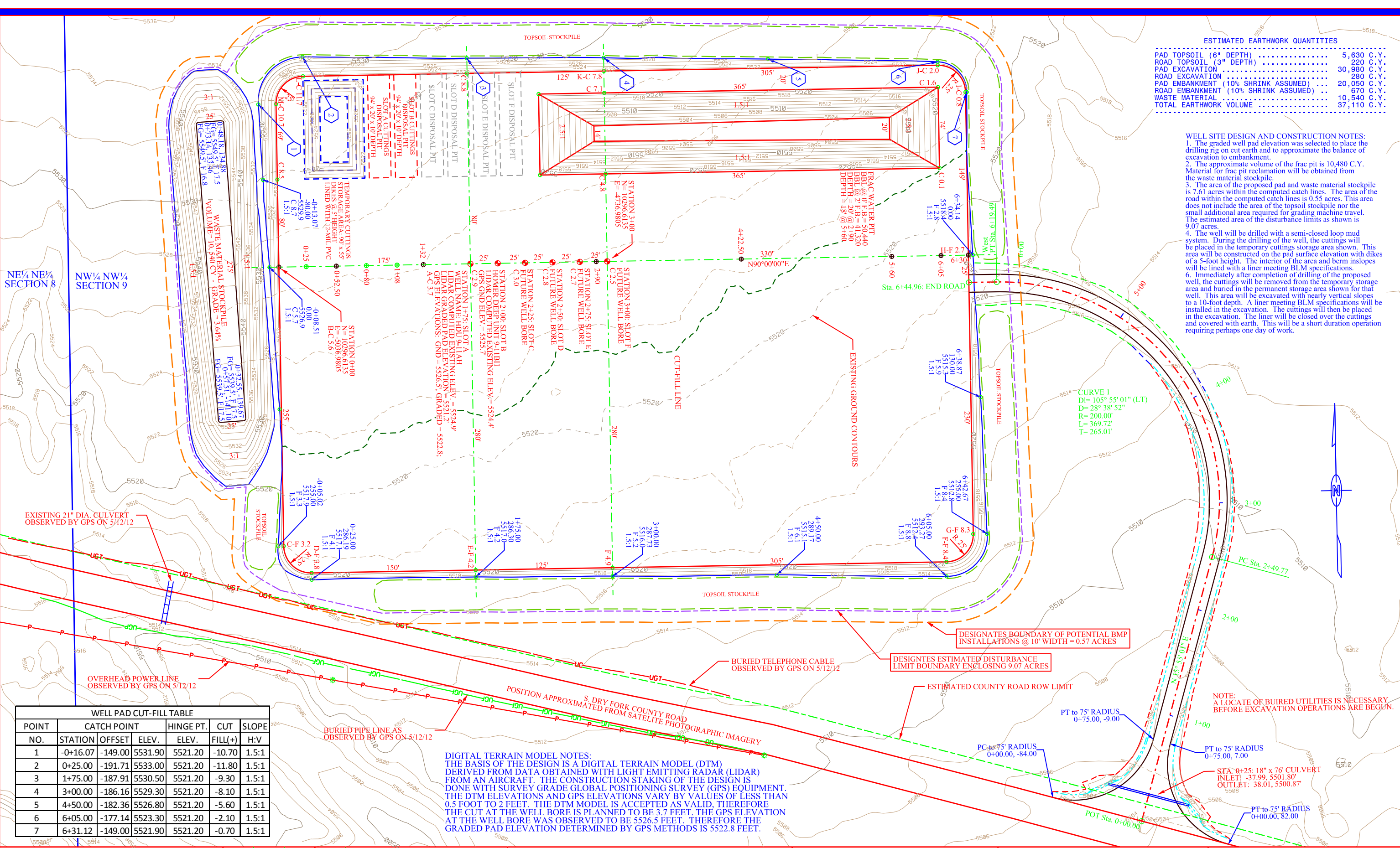


ESTIMATED EARTHWORK QUANTITIES	
PAD TOPSOIL (6" DEPTH)	5,630 C.Y.
ROAD TOPSOIL (3" DEPTH)	220 C.Y.
PAD EXCAVATION	30,980 C.Y.
ROAD EXCAVATION	280 C.Y.
PAD EMBANKMENT (10% SHRINK ASSUMED)	20,050 C.Y.
ROAD EMBANKMENT (10% SHRINK ASSUMED)	670 C.Y.
WASTE MATERIAL	10,540 C.Y.
TOTAL EARTHWORK VOLUME	37,110 C.Y.

WELL SITE DESIGN AND CONSTRUCTION NOTES:
1. The graded well pad elevation was selected to place the drilling rig on cut earth and to approximate the balance of excavation to embankment.
2. The approximate volume of the frac pit is 10,480 C.Y. Material for frac pit reclamation will be obtained from the waste material stockpile.
3. The area of the proposed pad and waste material stockpile is 7.61 acres within the computed catch lines. The area of the road within the computed catch lines is 0.55 acres. This area does not include the area of the topsoil stockpile nor the small additional area required for grading machine travel. The estimated area of the disturbance limits as shown is 9.07 acres.
4. The well will be drilled with a semi-closed loop mud system. During the drilling of the well, the cuttings will be placed in the temporary cuttings storage area shown. This area will be constructed on the pad surface elevation with dikes of a 5-foot height. The interior of the area and berm inslopes will be lined with a liner meeting BLM specifications.
5. Immediately after completion of drilling of the proposed well, the cuttings will be removed from the temporary storage area and buried in the permanent storage area shown for that well. This area will be excavated with nearly vertical slopes to a 10-foot depth. A liner meeting BLM specifications will be installed in the excavation. The cuttings will then be placed in the excavation. The liner will be closed over the cuttings and covered with earth. This will be a short duration operation requiring perhaps one day of work.



WELL PAD CUT-FILL TABLE					
POINT NO.	STATION	OFFSET	ELEV.	HINGE PT. ELEV.	CUT FILL(+) SLOPE H:V
1	-0+16.07	-149.00	5531.90	5521.20	-10.70 1.5:1
2	0+25.00	-191.71	5533.00	5521.20	-11.80 1.5:1
3	1+75.00	-187.91	5530.50	5521.20	-9.30 1.5:1
4	3+00.00	-186.16	5529.30	5521.20	-8.10 1.5:1
5	4+50.00	-182.36	5526.80	5521.20	-5.60 1.5:1
6	6+05.00	-177.14	5523.30	5521.20	-2.10 1.5:1
7	6+31.12	-149.00	5521.90	5521.20	-0.70 1.5:1

DIGITAL TERRAIN MODEL NOTES:
THE BASIS OF THE DESIGN IS A DIGITAL TERRAIN MODEL (DTM) DERIVED FROM DATA OBTAINED WITH LIGHT EMITTING RADAR (LIDAR) FROM AN AIRCRAFT. THE CONSTRUCTION STAKING OF THE DESIGN IS DONE WITH SURVEY GRADE GLOBAL POSITIONING SURVEY (GPS) EQUIPMENT. THE DTM ELEVATIONS AND GPS ELEVATIONS VARY BY VALUES OF LESS THAN 0.5 FOOT TO 2 FEET. THE DTM MODEL IS ACCEPTED AS VALID, THEREFORE THE CUT AT THE WELL BORE IS PLANNED TO BE 3.7 FEET. THE GPS ELEVATION AT THE WELL BORE WAS OBSERVED TO BE 5526.5 FEET. THEREFORE THE GRADED PAD ELEVATION DETERMINED BY GPS METHODS IS 5522.8 FEET.

PREPARED BY:
P.E. GROSCH CONSTRUCTION, INC.
SURVEYORS - ENGINEERS - CONSTRUCTORS
P. O. BOX 36 WORLAND, WY 82401 (307)347-3332

SUR:		PRJ. #:	24a12
DES:	SAG	4/18/12	REC: lidar
DWN:	SAG	10/22/12	FILE: T7400/GpkData-v8/Client/Black Hills E&P/Colo/Mesa
REV:	SAG	11/21/12	DWG: 24A12 HDU 9-11/Dgn/9-11_ex6A-site

SCALE: 1" = 80'
0 80 160 240
CONTOUR INTERVAL: TWO FEET

OWNER
**BLACK HILLS PLATEAU
PRODUCTION COMPANY, LLC**
DENVER, COLORADO

PROJECT
**HOMER DEEP UNIT 9-11AH
HOMER DEEP UNIT 9-11BH**
NW¼ NW¼, SECTION 9, T. 8 S., R. 98 W.
GARFIELD COUNTY, COLORADO

DRAWING TITLE
EXHIBIT VI-A
DRAWING DESCRIPTION
WELL SITE GRADING PLAN