B SUNDRY Do not use th	UNITED STATE EPARTMENT OF THE I UREAU OF LAND MANA NOTICES AND REPO is form for proposals to II. Use form 3160-3 (AP	NTERIOR GEMENT RTS ON W	Carlsb ELLS -enter an O	ad Fi CD A	_ OMB N	APPROVED O. 1004-0137 ary 31, 2018  or Tribe Name	
	TRIPLICATE - Other ins		·		7. If Unit or CA/Agree NMNM71016T	ement, Name and/or No.	
1. Type of Well					8. Well Name and No.	IIT CVX JV BS 24H	
Oil Well ☐ Gas Well ☐ Other  2. Name of Operator Contact: STEPHANIE RABADUE					9. API Well No.		
BOPCO LP	E-Mail: stephanie				30-015-41598-0	·	
3a. Address 6401 HOLIDAY HILL RD BLDG 5 SUITE 200 MIDLAND, TX 79707  3b. Phone No. Ph: 432-62					10. Field and Pool or I WCG06S25300	20-BONE SPRING	
4. Location of Well (Footage, Sec., T	T., R., M., or Survey Description	1)			11. County or Parish, State		
Sec 1 T25S R30E SWSW 165FSL 1160FWL 32.091039 N Lat, 103.502139 W Lon					EDDY COUNTY	ζ, <b>NM</b>	
12. CHECK THE AI	PPROPRIATE BOX(ES)	TO INDICA	TE NATURE O	F NOTICE,	REPORT, OR OTH	IER DATA	
TYPE OF SUBMISSION			TYPE OF	ACTION			
Notice of Intent	☐ Acidize	☐ Dee	epen	☐ Product	ion (Start/Resume)	☐ Water Shut-Off	
☐ Subsequent Report	☐ Alter Casing	-	draulic Fracturing	☐ Reclam		☐ Well Integrity	
☐ Final Abandonment Notice	☐ Casing Repair☐ Change Plans	<del></del>	v Construction g and Abandon	Recomp	arily Abandon		
T man / toundomment (vonce	Convert to Injection		g Back	☐ Water D	-		
13. Describe Proposed or Completed Ope If the proposal is to deepen directions Attach the Bond under which the won following completion of the involved testing has been completed. Final Attached that the site is ready for fix TO Energy, Inc / BOPCO, L. trunkline corridor be granted the 23-24S-30E. See attached pelectrical, and buried oil, gas, system that will reduce the lon Unit.  The purpose of the trunkline is acreage for the purpose of sel	ally or recomplete horizontally, it will be performed or provide to operations. If the operation repandoment Notices must be filinal inspection.  Prespectfully requests a prough Poker Lake Unit Solats for full route description and water pipelines as page-term impacts of oil and to extend the midstream	give subsurface the Bond No. o sults in a multip set only after all 42,993.35' lo section 12-24 tion. The trun art of a fully o gas develop	locations and measure file with BLM/BIA le completion or recorded requirements, including, 180? wide eas S-29E and Section kline will include: ontained, buried to ment throughout extern throughout and throughout extern throughout	red and true ve. Required sulmpletion in a ring reclamation assement of ons 7-10, 15 road, rakeaway Poker Lake	rtical depths of all pertin sequent reports must be new interval, a Form 316 n, have been completed a ARTES AUG	ent markers and zones. filed within 30 days 0-4 must be filed once nd the operator has  ONSERVATION IA DISTRICT 2 1 2019	
acreage for the purpose of sel water, and interconnect critica the environment, long-term de	ling oil and gas, disposal I pieces of operations saf velopment, and mineral p	of produced ely and respondention.	water, reuse of pronsibly with consi	roduced deration to	Stip EA. Attac System	ulations	
oved.COK-01/31/20	19. DOI-BLM	-NM-POS	20-2019-C	748-	EA. Attac	hed.	
	true and correct. Electronic Submission # For E nmitted to AFMSS for proce IIE RABADUE	440578 verifie BOPCO LP, se essing by PRI	SCILLA PEREZ or	Information 1 1 10/22/2018 ATORY AN	(19PP0188SE)		
Signature (Electronic S	(uhmicsion)		Date 10/22/20	110			
- (Dictionic 3	THIS SPACE FO	OR FEDERA	Date 10/22/20		 SE		
Approved By	wh		Title AFA	1-69	M	08/01/2014	
Conditions of approval, if any are attached certify that the applicant holds legal or equivalent would entitle the applicant to condu	itable title to those rights in the	not warrant or subject lease	Office	d		,	
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s				willfully to ma	ke to any department or	agency of the United	

# Additional data for EC transaction #440578 that would not fit on the form

### 32. Additional remarks, continued

- Attachments:
  1. Pipeline Request
  2. Line Detail
  3. Plats

EXHIBIT	NO.	1	



# Bureau of Land Management, Carlsbad Field Office 620 E. Greene Street Carlsbad, NM 88220

7/31/2019



Cultural and Archaeological Resources

BLM Report No. 19-0744/19-0161

# NOTICE OF STIPULATIONS

Historic properties in the vicinity of this project are protected by federal law. In order to ensure that they are not damaged or destroyed by construction activities, the project proponent and construction supervisors shall ensure that the following stipulations are implemented.

Project Name	RLUROW2 West
	1). A 3-day preconstruction call-in notification. Contact BLM Inspection and Enforcement at
Required *	2. Professional archaeological monitoring. Contact your BLM project archaeologist at for assistance.
A. 🔯	These stipulations must be given to your monitor at least <u>5 days</u> prior to the start of construction.
B. 🔯	No construction, including vegetation removal or other site prep may begin prior to the arrival of the monitor.
	3. Cultural site barrier fencing. (Your monitor will assist you).
A	<u>A temporary site protection barrier(s)</u> shall be erected prior to all ground-disturbing activities. The minimum barrier(s) shall consist of upright wooden survey lath spaced no more than ten (10) feet apart and marked with blue ribbon flagging or blue paint. There shall be no construction activities or vehicular traffic past the barrier(s) at any time.
B.	A permanent, 4-strand barbed wire fence strung on standard "T-posts" shall be erected prior to all ground-disturbing activities. No construction activities or vehicle traffic are allowed past the fence.
Required	4. The archaeological monitor shall:
<b>A</b> . 🔯	Monitor ROW construction within 100ft of LA 194340 to make sure the ROW stays within its allotted space of construction.
<b>B</b> . ⊠	
<b>G</b> . [1]	
D.[.]	
	If subsurface cultural resources are encountered during the monitoring, all activities shall cease and a BLM-CFO archaeologist shall be notified immediately.
Other:	IF THE CONTRACT ARCHAEOLOGIST DOES NOT KNOW WHERE THE SITE(S) ARE LOCATED AT PLEASE COME BY THE CARLSBAD BLM AND MAPS AND OTHER DATA WILL BE PROVIDED UPON REQUEST TO THE CONTRACT ARCHAEOLOGIST

Site Protection and Employee Education: It is the responsibility of the project proponent and his construction supervisor to inform all employees and subcontractors that cultural and archaeological sites are to be avoided by all personnel, vehicles, and equipment; and that it is illegal to collect damage, or disturb cultural resources on Public Lands:

Aaron/Whaley (575) 234-5986 Elia Perez (575) 234-6231 Company Reference: XTO Permian

WELL NO. & NAME: Poker Lake Unit CVX JV BS 24H PROJECT: Poker Lake Unit Row 2 West Trunkline Corridor

#### **BURIED PIPELINE STIPULATIONS**

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- 4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way. 6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level. 7. The maximum allowable disturbance for construction in this right-of-way will be 30 feet: Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed 20 feet. The trench is included in this area. (Blading is defined as the complete removal of brush and ground vegetation.) Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed 30 feet. The trench and bladed area are included in this area. (Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.) The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (Compressing can be caused by vehicle tires, placement of equipment, etc.) 8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately \_\_\_6\_\_ inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding. 9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer. 10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade. 11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices. 12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix. ( ) seed mixture 3 ( ) seed mixture 1 (X) seed mixture 2 ( ) seed mixture 4 ( ) seed mixture 2/LPC ( ) Aplomado Falcon Mixture

- 13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" **Shale Green**, Munsell Soil Color No. 5Y 4/2.
- 14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.
- 15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.
- 16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.
- 17. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.
- 18. Any damage to structures that provide water to livestock throughout the life of the ROW, caused by operations from the ROW, must be immediately corrected by the Holder. The Holder must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.
- 19. <u>Escape Ramps</u> The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:
  - a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.
  - b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

## 20. Special Stipulations:

#### **Texas Hornshell**

Zone D – CCA Boundary requirements. The oil and gas Participant shall comply with SPCC requirements (Appendix H) in accordance with 40 CFR Part 112.

### **Hydrology:**

When crossing ephemeral drainages the pipeline will be buried to a minimum depth of 48 inches from the top of pipe to ground level. Erosion control methods such as gabions and/or rock aprons should be placed on both up and downstream sides of the pipeline crossing. In addition, curled (weed free) wood/straw fiber wattles/logs and/or silt fences should be placed on the downstream side for sediment control during construction and maintained until soils and vegetation have stabilized. Water bars should be placed within the ROW to divert and dissipate surface runoff. A pipeline access road is not permitted to cross these ephemeral drainages. Traffic should be diverted to a preexisting route. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation.

Any water erosion that may occur due to construction or during the life of the pipeline system will be quickly corrected and proper measures will be taken to prevent erosion. When crossing ephemeral drainages the soil crown should be level with the surface to allow water to flow without impedance.

Prior to pipeline installation/construction a leak detection plan will be developed. The method(s) could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event. Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.

### Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

Species	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

<sup>\*</sup>Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

**Company Reference**: XTO Permian

WELL NO. & NAME: Poker Lake Unit CVX JV BS 24H PROJECT: Poker Lake Unit Row 2 Trunkline Corridor

#### STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
- 2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.
- 4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.
- 5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication

deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

- 6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 7. Any damage to structures that provide water to livestock throughout the life of the ROW, caused by operations from the ROW, must be immediately corrected by the Holder. The Holder must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.
- 8. The Holder shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The Holder shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.
- 9. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.
- 10. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.
- 11. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.
- 12. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the

immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

### 11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.

### Texas Hornshell

Zone D – CCA Boundary requirements. The oil and gas Participant shall comply with SPCC requirements (Appendix H) in accordance with 40 CFR Part 112.

### Hydrology:

Any water erosion that may occur due to the construction of overhead electric line and during the life of the power line will be quickly corrected and proper measures will be taken to prevent future erosion. A power pole should not be placed in drainages, playas, wetlands, riparian areas, or floodplains and must span across the features at a distance away that would not promote further erosion.

Company Reference: XTO Permian

WELL NO. & NAME: Poker Lake Unit CVX JV BS 24H

**PROJECT:** Poker Lake Unit Row 2 West Infrastructure Corridor

#### ON LEASE ACCESS ROADS

#### Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

### Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

### Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

#### Ditching

Ditching shall be required on both sides of the road.

#### **Turnouts**

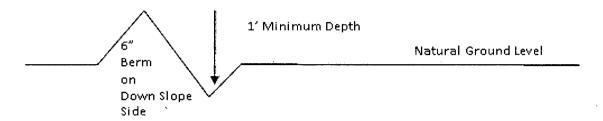
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

### Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

### Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

### Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope: 
$$\frac{400'}{4\%}$$
 + 100' = 200' lead-off ditch interval

#### Cattleguards

An appropriately sized cattleguard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattleguards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguards that are in place and are utilized during lease operations.

### **Fence Requirement**

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

#### **Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

# **Construction Steps**

- 1. Salvage topsoil
- 2. Construct road
- 3. Redistribute topsoil 4. Revegetate slopes

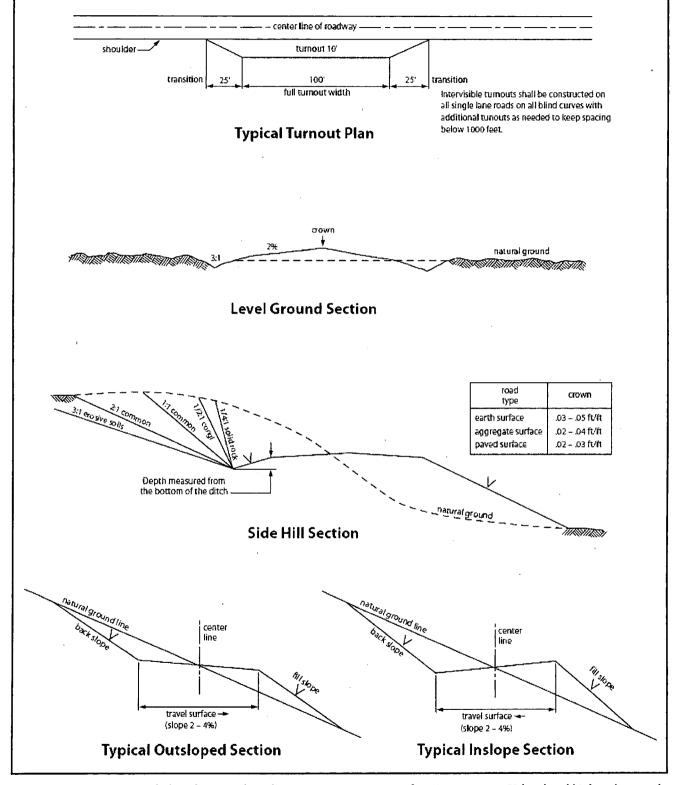


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

Special Requirements:

# Wildlife:

# **Texas Hornshell**

Zone D – CCA Boundary requirements. The oil and gas Participant shall comply with SPCC requirements (Appendix H) in accordance with 40 CFR Part 112.