



**US Army Corps
of Engineers** ®
Fort Worth District

Public Notice

Applicant: Anadarko E&P Company, L.P.

Permit Application No.: SWF-2012-00067

Date: April 30, 2012

The purpose of this public notice is to inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. We hope you will participate in this process.

Regulatory Program

Since its early history, the U.S. Army Corps of Engineers has played an important role in the development of the nation's water resources. Originally, this involved construction of harbor fortifications and coastal defenses. Later duties included the improvement of waterways to provide avenues of commerce. An important part of our mission today is the protection of the nation's waterways through the administration of the U.S. Army Corps of Engineers Regulatory Program.

Section 10

The U.S. Army Corps of Engineers is directed by Congress under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) to regulate *all work or structures in or affecting the course, condition or capacity of navigable waters of the United States*. The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

Section 404

The U.S. Army Corps of Engineers is directed by Congress under Section 404 of the Clean Water Act (33 USC 1344) to regulate the *discharge of dredged and fill material into all waters of the United States, including wetlands*. The intent of the law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.

Contact

Name: Mr. Scott Kelly

Phone Number: (817) 886-1662

JOINT PUBLIC NOTICE

U.S. ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT

AND

RAILROAD COMMISSION OF TEXAS

SUBJECT: Application for a Department of the Army Permit under Section 404 of the Clean Water Act (CWA) and for water quality certification under Section 401 of the CWA to discharge dredged and fill material into waters of the United States associated with the construction of the proposed Carthage Gas Unit (CGU) multiple well head site, and access road in Panola County, Texas.

APPLICANT: Anadarko E&P Company, L.P.
c/o Ms. Sue Beem
P.O. Box 1300
Houston, Texas 77251

APPLICATION NUMBER: SWF-2012-00067

DATE ISSUED: April 30, 2012

LOCATION: The proposed multiple well head site, and access road would be located in the Sabine River floodplain approximately 7.5 miles west of the City of Carthage in Panola County, Texas (Sheets 1 and 2 of 6). The proposed project would be located approximately at Latitude 32.184063 North and Longitude -94.415830 West on the Beckville, Texas 7.5-minute USGS quadrangle map in the USGS Hydrologic Unit 12010002.

OTHER AGENCY AUTHORIZATIONS: Section 401 State Water Quality Certification

PROJECT DESCRIPTION: Anadarko E&P Company, L.P. (Anadarko) proposes to discharge approximately 294 cubic yards of dredged and fill material into 0.12 acres (661 linear feet) of waters of the United States (US) in conjunction with the construction of the CGU Nos. 23-55HH, 23-56HH, 23-57HH, 20-53HH, and 20-54HH well site and access road within the floodplain of the Sabine River in Panola County, Texas (Sheet 2 of 6). The applicant proposes to construct a 585 feet by 425 feet (approximately 5.71-acre) well pad that would be located adjacent to an existing lease road. No additional impacts to waters of the U.S. would be required. The proposed project manipulates the stream's course, condition, capacity and location therefore the proposed project does not meet the terms and conditions of a Regional General Permit No. 11 (RGP-11). Therefore, a standard individual permit would be required.

The purpose of the proposed project is to obtain hydrocarbons on an existing mineral lease. The project is located within the floodplain of the Sabine River; therefore, all wetlands delineated on the proposed project are jurisdictional under Section 404 of the Clean Water Act. Construction of the proposed CGU Nos. 23-55HH, 23-56HH, 23-57HH, 20-53HH, and 20-54HH well site and access road would adversely impact a total of 0.12 acres (661 linear feet) of ephemeral stream.

The proposed project is located within mixed pine/hardwood communities. Dominant vegetation within the tree stratum consists of loblolly pine (*Pinus taeda*), sweetgum (*Liquidambar styraciflua*), white oak (*Quercus alba*), and water oak (*Quercus nigra*). The sapling stratum is dominated by sweetgum, water oak, white oak, and southern red oak (*Quercus falcata*). Dominant vegetation within the shrub stratum consists of water oak, American elm (*Ulmus americana*), giant cane (*Arundinaria gigantea*), yaupon (*Ilex vomitoria*), and American beautyberry (*Callicarpa americana*). The herbaceous stratum is dominated by sessile-flowered chasmanthium (*Chasmanthium sessiliflorum*) and sedges (*Carex* sp.). The woody vine stratum is dominated by common greenbrier (*Smilax rotundifolia*) and Japanese honeysuckle (*Lonicera japonica*).

During project planning, the applicant considered several alternatives in an effort to avoid and minimize adverse impacts to waters of the United States. Under the no action alternative, the proposed well site, access road would not be constructed and the applicant would not produce natural gas. Adverse environmental impacts associated with the proposed project would be avoided at least in the short term. Most likely, the ongoing pressure for natural gas exploration and production in the area would continue from other operators with existing mineral rights.

The applicant also considered other sites for the proposed project, however, movement of the site is restricted by the limits of the applicant's lease and their requirement to maintain legal distances between wells. Anadarko has proposed to construct one well pad to accommodate five well heads. An alternative would be to construct five well pads for each of the proposed well heads. This alternative would also require separate access roads, which would most likely have greater impacts to waters of the United States.

The applicant considered constructing a larger well site to drill the CGU Nos. 23-55HH, 23-56HH, 23-57HH, 20-53HH, and 20-54HH well heads. A larger well site would provide additional workspace during drilling operations, and would also result in greater adverse impacts to waters of the United States. The applicant has reduced the proposed multiple well head site to 585 feet by 425 feet to minimize adverse impacts to waters of the United States, and to provide the minimum pad size that would safely accommodate the drilling rig for the proposed operation. The proposed well site is located adjacent to an existing lease road, which would further minimize impacts to wetlands within the Sabine River floodplain.

Upon completion of drilling activity, all saltwater, drilling mud, brine, hydrocarbons, and any substances considered toxic under federal regulations would be removed from the location and taken to an upland disposal site. The CGU 23-55HH, 23-56HH, 23-57HH, 20-53HH, and 20-54HH reserve pit would be filled within 90 days following the termination of drilling the well.

The portion of the pad that is no longer needed for well operation and maintenance would be utilized as the on-site mitigation area (Sheet 4 and 5 of 6).

On-site mitigation would include 480 linear feet of rerouted stream around the proposed well site (Sheet 4 and 5 of 6). Water flow of the ephemeral stream is currently obscured by an existing wildlife plot. Rerouting the stream would provide continuous water flow and connectivity feeding into the intermittent stream. Erosion control standards and BMP's would be implemented in accordance with Texas Commission on Environmental Quality Tier 1 Checklist.

Anadarko has proposed to purchase credits from Daisy Mitigation Bank to compensate off-site for unavoidable adverse project impacts that would not be compensated for by on-site mitigation. The CGU Nos. 23-55HH, 23-56HH, 23-57HH, 20-53HH, and 20-54HH well site is located in the secondary service area of the Daisy Mitigation Bank. A mitigation ratio of 6:1 was used for permanent impact ratios in addition to a 1.5 secondary service area multiplier to determine the amount of mitigation credits necessary to compensate for adverse impacts to the ephemeral stream that would be impacted by the proposed project. The mitigation calculation also takes into account the on-site mitigation that is proposed by the applicant.

Mitigation Calculation for the Proposed CGU 23-55HH, 23-56HH, 23-57HH, 20-53HH, & 20-54HH Well Site in Panola County, Texas

Water ID	Total Impacts (Linear Feet)	On-Site Mitigation (Linear Feet)	Off-Site Mitigation (Linear Feet)	Mitigation Ratio (Linear Feet)	Secondary Multiplier (Linear Feet)	Total Credits
Ephemeral	661	480	181	6:1	1.5	45
Total	661	480	181			45

Upon well abandonment, the applicant proposes to plug and cap each well in accordance with state regulations prior to the final restoration of the site. The final restoration of the site would follow the same criteria as the previous on-site restoration.

PUBLIC INTEREST REVIEW FACTORS: This application will be reviewed in accordance with 33 CFR 320-332, the Regulatory Program of the U. S. Army Corps of Engineers (USACE), and other pertinent laws, regulations, and executive orders. Our evaluation will also follow the guidelines published by the U. S. Environmental Protection Agency pursuant to Section 404(b)(1) of the CWA. The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impact, of the proposed activity on the public interest. That decision will reflect the national concerns for both protection and utilization of important resources. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including its cumulative effects. Among the factors addressed are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

The USACE is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the USACE in determining whether to issue, issue with modifications, or conditions, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

STATE WATER QUALITY CERTIFICATION:

Railroad Commission of Texas (RRC) certification is required for activities associated with the exploration, development, or production of oil, gas, or geothermal resources, as described in Tex. Nat. Res. Ann. §91.101. Concurrent with the processing of this Department of the Army Permit application, the RRC is reviewing this application under Section 401 of the Clean Water Act and Title 16, Texas Administrative Code, Section 3.93, to determine if the proposed work would comply with applicable water quality laws and regulations. By virtue of an agreement between the U. S. Army Corps of Engineers (USACE) and the RRC, this public notice is issued for the purpose of advising all known interested persons that there is pending before the RRC a decision on water quality certification under the above authorities. Written comments concerning the request for certification may be submitted to the Assistant Director, Environmental Services, Railroad Commission of Texas, P. O. Box 12967, Austin, Texas 78711-2967. The public comment period extends 30 days from the date of publication of this notice. The RRC may also hold a public meeting on the request for certification if the RRC determines that a public meeting is in the public interest. If the RRC holds a meeting to receive public comment on a request for certification, the RRC will give notice of the meeting to the applicant, the USACE, and persons identified under 16 TAC §3.93(d)(2) at least ten days prior to the meeting.

ENDANGERED AND THREATENED SPECIES: The USACE has reviewed the U.S. Fish and Wildlife Service's latest published version of endangered and threatened species to determine if any may occur in the project area. The proposed project would be located in Panola County, where the bald eagle (*Haliaeetus leucocephalus*), Louisiana black bear (*Ursus americanus luteolus*), red wolf (*Canis rufus*), interior least tern (*Sterna antillarum athalassos*), the piping plover (*Charadrius melodus*), and the red-cockaded woodpecker (*Picoides borealis*) are known to occur or may occur as migrants. The bald eagle has been delisted and is being monitored. The Louisiana black bear, red wolf, interior least tern, the piping plover, and red-cockaded woodpecker are listed as a threatened species. Our initial review indicates that the proposed work would have no effect on federally-listed endangered or threatened species.

NATIONAL REGISTER OF HISTORIC PLACES: The proposed project has never been surveyed for the presence of historic or prehistoric cultural resources. No sites listed in the National Register of Historic Places are within the vicinity of the proposed work. The area has a

high potential for the presence of cultural resources. A survey of the area will be performed prior to impacts.

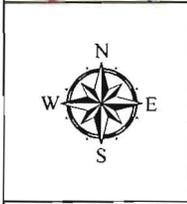
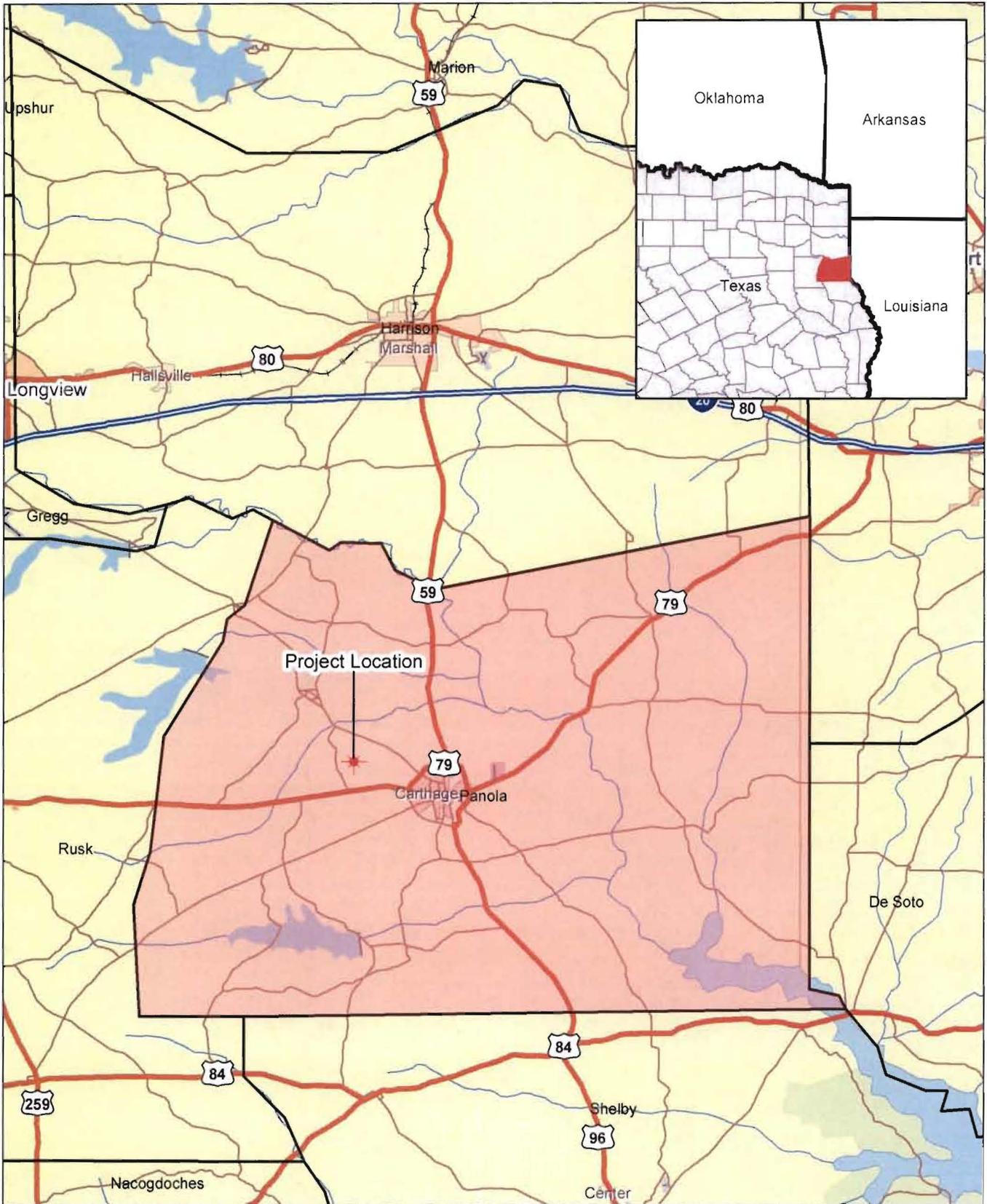
FLOODPLAIN MANAGEMENT: The USACE is sending a copy of this public notice to the local floodplain administrator. In accordance with 44 CFR part 60 (Flood Plain Management Regulations Criteria for Land Management and Use), the floodplain administrators of participating communities are required to review all proposed development to determine if a floodplain development permit is required and maintain records of such review.

SOLICITATION OF COMMENTS: The public notice is being distributed to all known interested persons in order to assist in developing fact upon which a decision by the USACE may be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition.

PUBLIC HEARING: Prior to the close of the comment period any person may make a written request for a public hearing setting forth the particular reasons for the request. The District Engineer will determine whether the issues raised are substantial and should be considered in his permit decision. If a public hearing is warranted, all known interested persons will be notified of the time, date, and location.

CLOSE OF COMMENT PERIOD: All comments pertaining to this Public Notice must reach this office on or before May 30, 2012, which is the close of the comment period. Extensions of the comment period may be granted for valid reasons provided a written request is received by the limiting date. If no comments are received by that date, it will be considered that there are no objections. Comments and requests for additional information should be submitted to ; Regulatory Branch, CESWF-PER-R; U. S. Army Corps of Engineers; Post Office Box 17300; Fort Worth, Texas 76102-0300. You may visit the Regulatory Branch in Room 3A37 of the Federal Building at 819 Taylor Street in Fort Worth between 8:00 A.M. and 3:30 P.M., Monday through Friday. Telephone inquiries should be directed to (817) 886-1731. Please note that names and addresses of those who submit comments in response to this public notice may be made publicly available.

DISTRICT ENGINEER
FORT WORTH DISTRICT
CORPS OF ENGINEERS



Sheet 1 of 6
 Vicinity Map of the Proposed CGU 23-55HH, 23-56HH,
 23-57HH, 20-53HH, & 20-54HH Project Area in Rusk County, TX

0 5 10 20 30 Miles

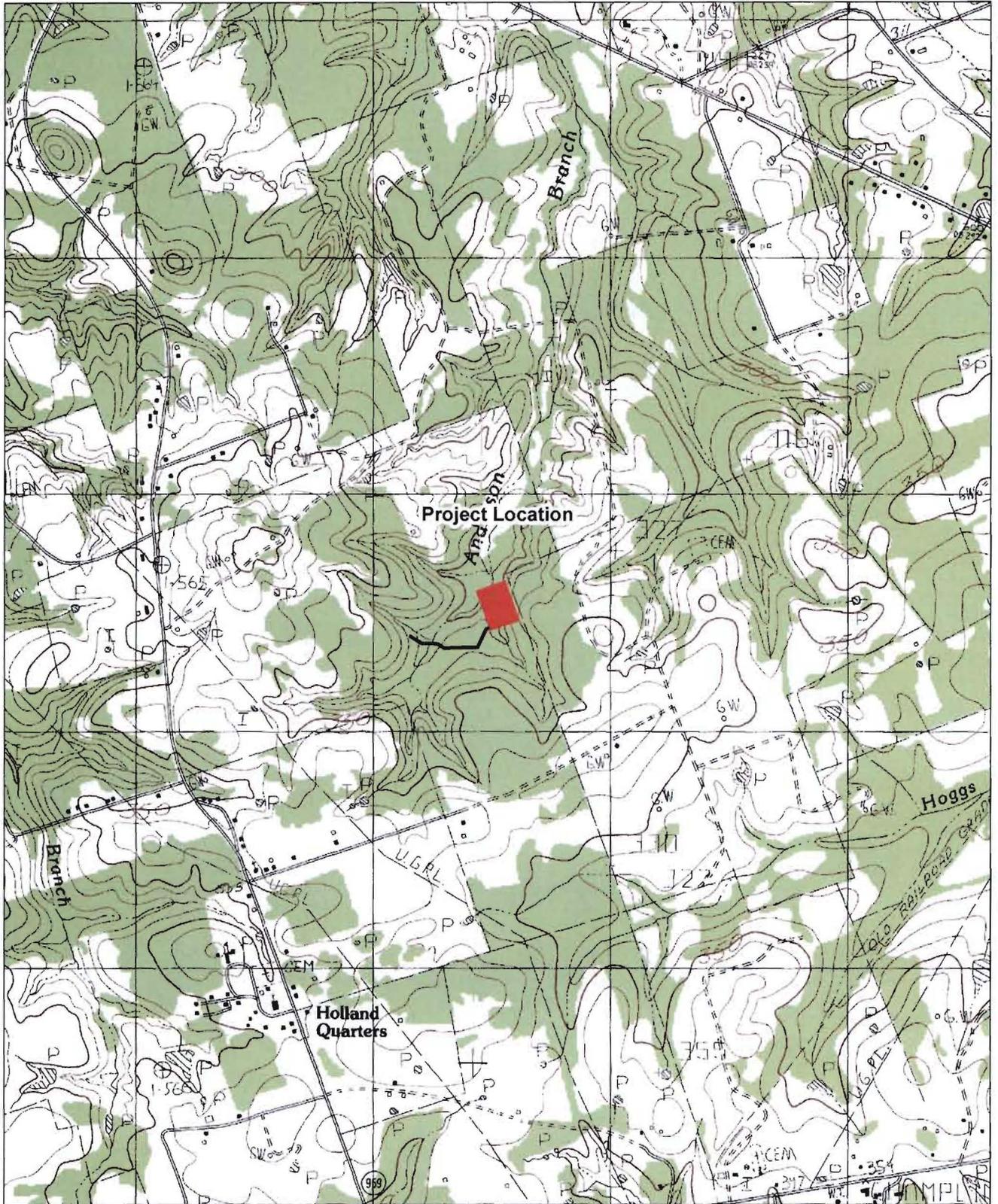


Anadarko E&P Company, LP
 Project Number: 046056.00

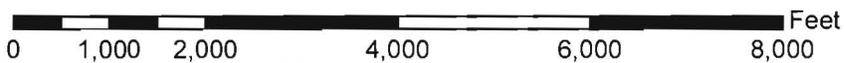
Date: 12/21/2011

Coordinate Sys: Lat/Long NAD 27
 Units: Deg, Min, Sec

1501 Bill Owens Parkway
 Longview, TX 75604
 Phone: (903) 297-4673
 Fax: (903) 297-4675



Sheet 2 of 6
 Topographic Features of the Proposed CGU 23-55HH, 23-56HH, 23-57HH,
 20-53HH, and 20-54HH Well Site and Access Road in Panola County, TX

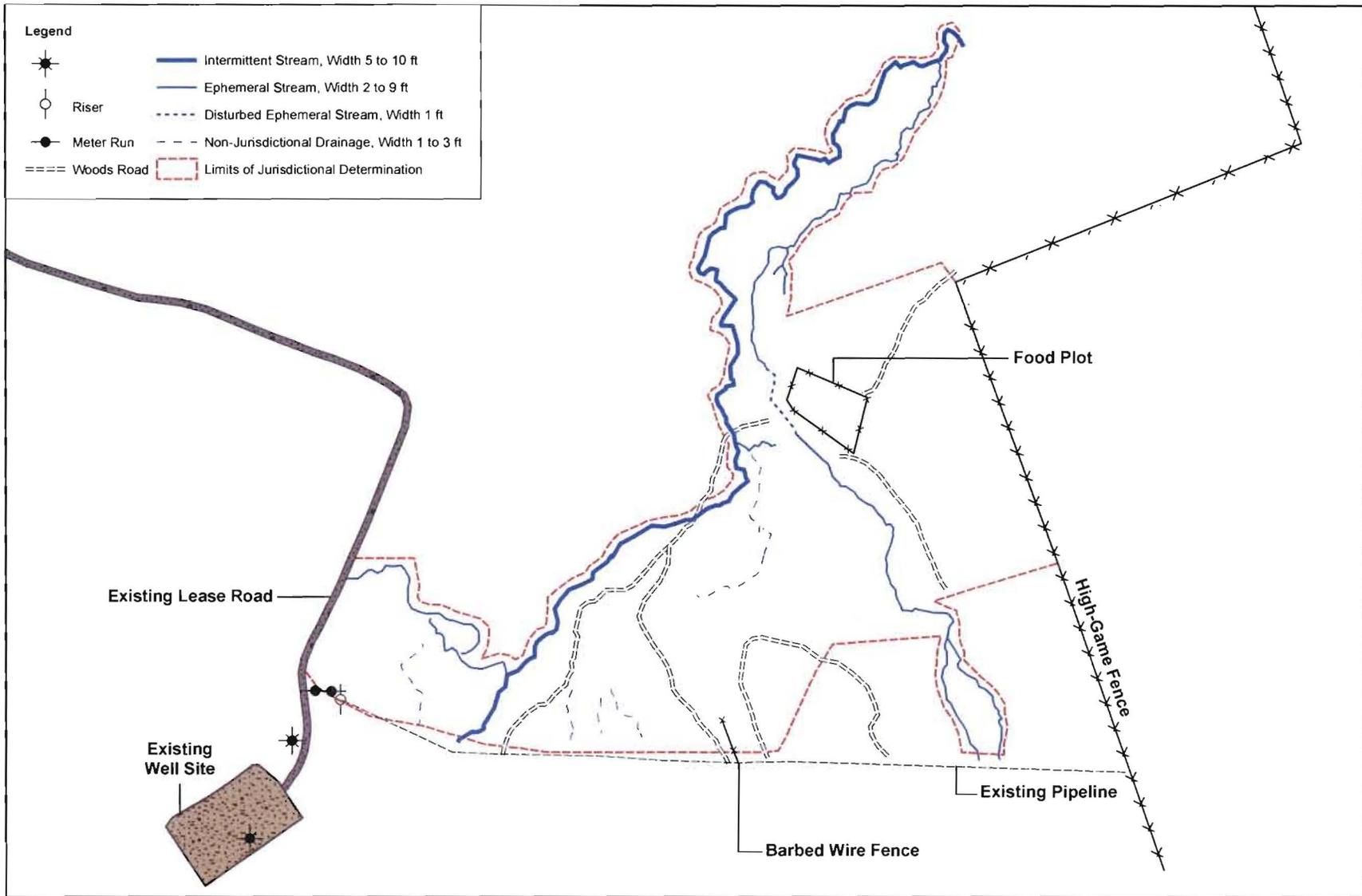


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Anadarko E&P Company, LP
 Project Number: 046056.00

Date: 01/13/2012

Base Map: USGS 7.5 Minute Topographic
 Quadrangle: Beckville, TX (Provisional Ed., 1983)



Sheet 3 of 6
 Existing Conditions of the Proposed CGU 23-55HH, 23-56HH, 23-57HH,
 20-53HH, and 20-54HH Well Site and Access Road in Panola County, TX

0 250 500 1,000 1,500 Feet



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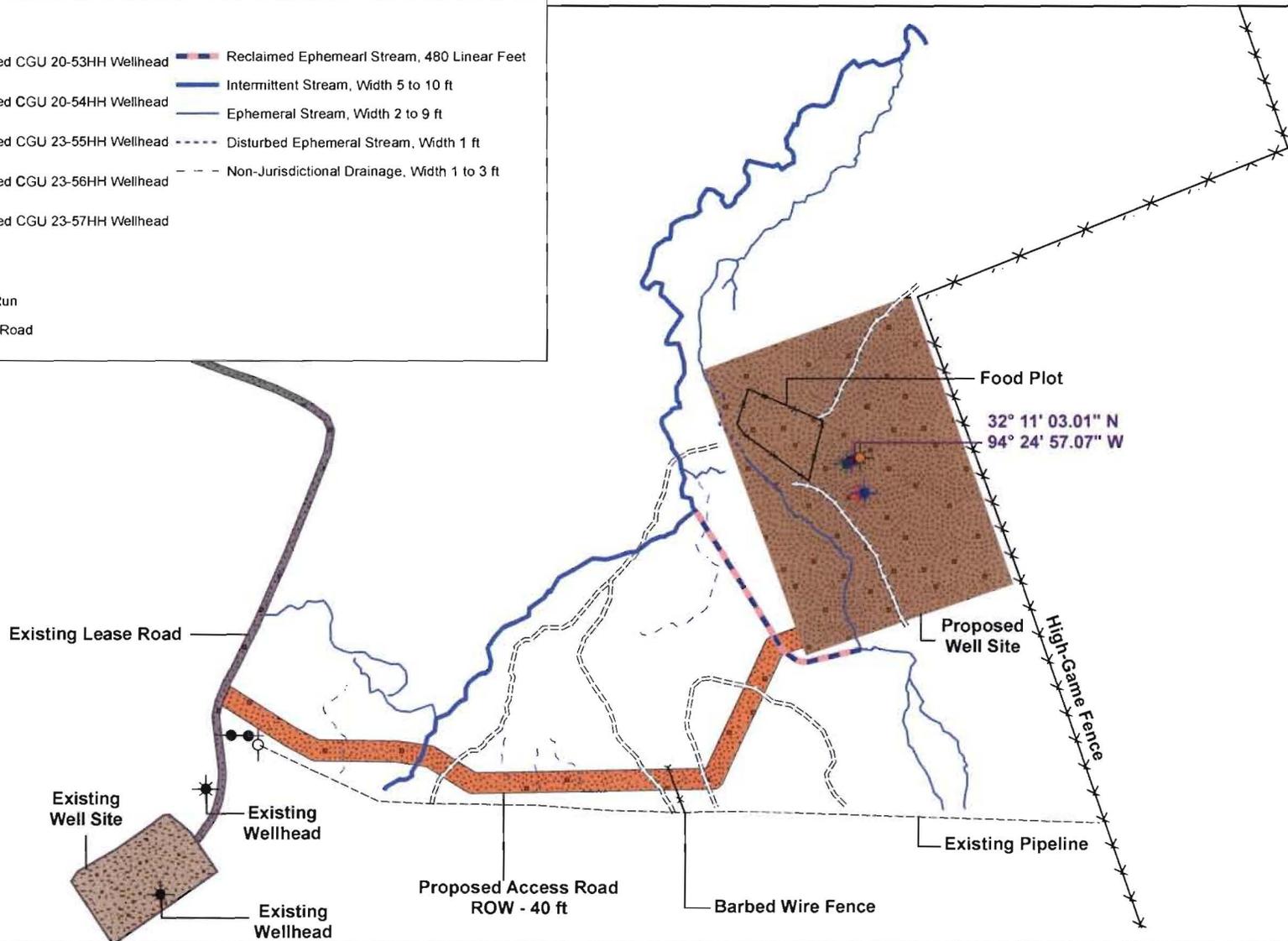
Project Number: 046056.00

Date: 01/13/2012

Coordinate System: Lat/Long NAD27
 Units: Deg, Min, Sec

Legend

-  Proposed CGU 20-53HH Wellhead
-  Proposed CGU 20-54HH Wellhead
-  Proposed CGU 23-55HH Wellhead
-  Proposed CGU 23-56HH Wellhead
-  Proposed CGU 23-57HH Wellhead
-  Riser
-  Meter Run
-  Woods Road
-  Reclaimed Ephemeral Stream, 480 Linear Feet
-  Intermittent Stream, Width 5 to 10 ft
-  Ephemeral Stream, Width 2 to 9 ft
-  Disturbed Ephemeral Stream, Width 1 ft
-  Non-Jurisdictional Drainage, Width 1 to 3 ft



Sheet 4 of 6
 Site Plan of the Proposed CGU 23-55HH, 23-56HH, 23-57HH,
 20-53HH, and 20-54HH Well Site and Access Road in Panola County, TX



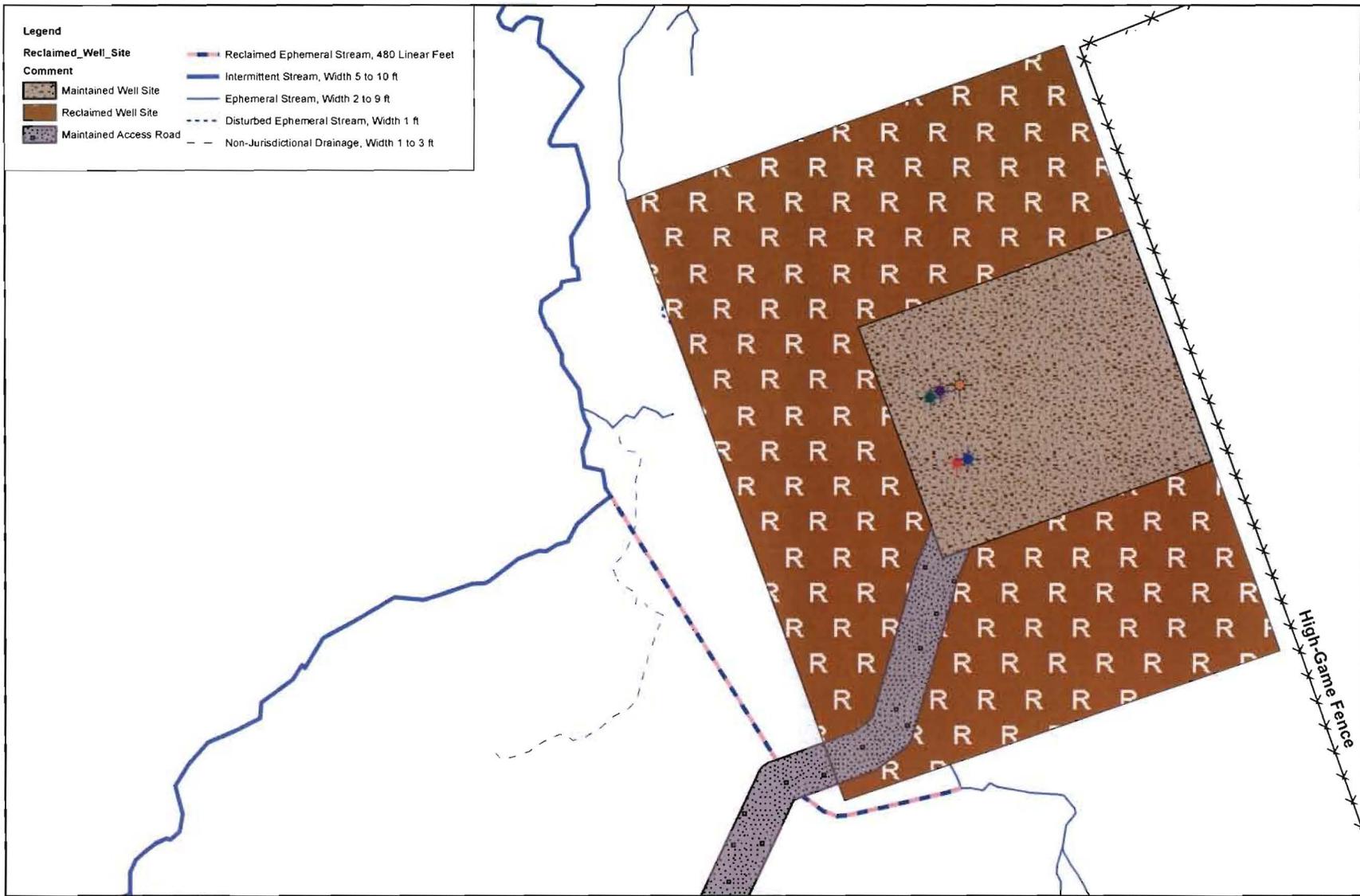
1501 Bill Owens Parkway
 Longview, TX 75604
 Phone: (903) 297-4673
 Fax: (903) 297-4675

Anadarko E&P Company, LP

Project Number: 046056.00

Date: 01/13/2012

Coordinate System: Lat/Long NAD27
 Units: Deg, Min, Sec



Sheet 5 of 6
 Reclamation Plan of the Proposed CGU 23-55HH, 23-56HH, 23-57HH,
 20-53HH, and 20-54HH Well Site and Access Road in Panola County, TX



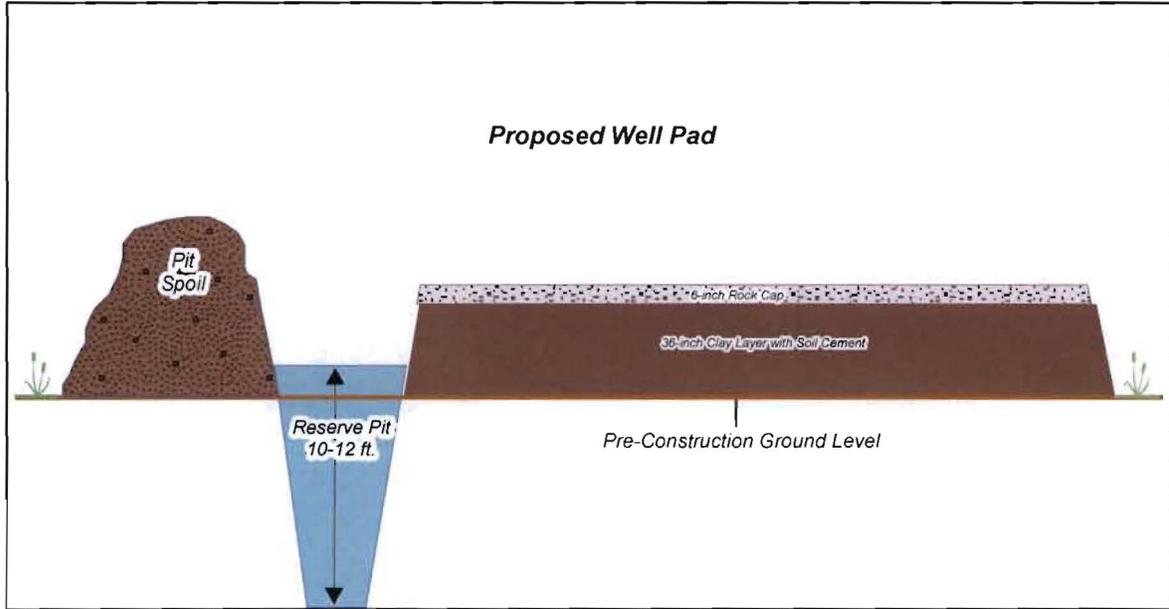
1501 Bill Owens Parkway
 Longview, TX 75604
 Phone: (903) 297-4673
 Fax: (903) 297-4675

Anadarko E&P Company, LP

Project Number: 046056.00

Date: 01/25/2012

Coordinate System: Lat/Long NAD27
 Units: Deg, Min, Sec



Not To Scale

Sheet 6 of 6
 Cross-Section View of the Proposed
 CGU 23-55HH, 23-56HH, 23-57HH,
 20-53HH, and 20-54HH Well Site
 and Access Road in Panola County, TX

Anadarko E&P Company, LP

Project Number: 046056.00

Sphere 3 Environmental, Inc.
 01/13/2011