PART V - K. Road Systems

§2737. Road Systems

A. Plans and Drawings. Each applicant for a surface coal mining and reclamation permit shall submit plans and drawings for each road, as defined in §105, to be constructed, used or maintained within the proposed permit area. The plans and drawings shall:
1. include a map, appropriate cross-sections, design drawings and specifications for road widths, gradients, surfacing materials, cuts, fill embankments, culverts, bridges, drainage ditches, low-water crossings and drainage structures;
2. contain the drawings and specifications of each proposed road that is located in the channel of an intermittent or perennial stream, as necessary for approval of the road by the office in accordance with §5433.D.1;
3. contain the drawings and specifications for each proposed ford of perennial or intermittent streams that is used as a temporary route, as necessary for approval of the ford by the office in accordance with §5435.A.3.b;
4. contain a description of measures to be taken to obtain approval of the office for alteration or relocation of a natural stream channel under §5435.A.4.e;
5. contain the drawings and specifications for each low-water crossing of perennial or intermittent stream channels so that the office can maximize the protection of the stream in accordance with §5435.A.4.f; and
6. describe the plans to remove and reclaim each road that would not be retained under an approved post-mining land use, and the schedule for this removal and reclamation.
B. Primary Road Certification. The plans and drawings for each primary road shall be prepared by, or under the direction of, and certified by a qualified, registered professional engineer as meeting the requirements of this Chapter; current, prudent engineering practices; and any design criteria established by the office.
C. Standard Design Plans. The office may establish engineering design standards for primary roads through the state program approval process, in lieu of engineering tests, to establish compliance with the minimum static safety factor of 1.3 for all embankments specified in §5435.A.2.

RESPONSES TO 2737: Exhibit 2703-1 identifies the approximate location of the primary roads (haulroads and access roads) planned for the Five Forks Mine. Construction plans and profiles for primary roads will be submitted to the Office prior to construction. Detailed design plans are located in the Appendices of this section.

General specifications used for the primary roads within the mine plan area include:

- A primary road will be located, insofar as practical, on the most stable available surface to minimize erosion.

- Each primary road will be constructed or reconstructed, and maintained to have adequate drainage control, using structures such as bridges, ditches, cross drains, and ditch relief drains. The drainage control system will be designed to safely pass the peak runoff from a 10-year, 6-hour precipitation event.
- Drainage pipes and culverts will be installed as designed and maintained in a free and operating condition and to prevent or control erosion at inlets and outlets.
- Drainage ditches will be constructed and maintained to prevent uncontrolled drainage over the road surface and embankment.
- Culverts will be installed and maintained to sustain the vertical soil pressure, the passive resistance of the foundation, and the weight of vehicles using the road.
- Natural stream channels will not be altered or relocated without prior approval.
- Structures for perennial or intermittent stream-channel crossings will be made using bridges, culverts, low-water crossings, or other structures designed, constructed and maintained using current, prudent engineering practices. Low-water crossings will be designed, constructed, and maintained to prevent erosion of the structure or streambed and additional contributions of suspended solids to streamflow.
- Primary roads will be surfaced with material approved as being sufficiently durable for the anticipated volume of traffic and the weight and speed of vehicles using the road.

All primary roads will be designed by, or under the direction of, and certified by a qualified Louisiana registered professional engineer. Designs and specifications will be submitted to the Office for its approval prior to construction. Designs of all primary roads will meet requirements of Sections 5433 and 5435 of the Regulations.

Ancillary roads will be used infrequently to travel throughout the mine for the following:

- service of the ponds and drainage areas,
- service of the substation and power system, and
- to provide access to development areas.

Surfacing material will be coarse aggregate with a thickness that will vary depending on the location of the road, the intended use, and the length of time the road will be in existence.

During reclamation, aggregate base used for the primary roads will be removed, stockpiled, and/or used as aggregate base on another active primary road. The reclaimed aggregate base may also be used as base on other ancillary roads\ramps, and areas of the mine where this material could be used beneficially. All aggregate base, not consumed within the mine will be used, during reclamation, as backfill by placing it at the bottom of the pits. However, in the event that some materials are deemed to be unsalvageable, they will be disposed of in accordance with the LDEQ's requirements for waste disposal.

Following removal of the road base, a minimum of four feet of approved materials will be used for reclamation. The area will be seeded, mulched, and revegetated as soon as possible after placement and grading of approved materials.

Table 2737-1. Primary Road Schedule

Appendix	Permit Term Submitted	Name/Description	Status
2737-1	1	Haulroad 'HR-1'	Approved *
2737-2	1	Mine Support Facilities Access Road	Approved *
2737-3	1	Stockpile/Boxcut Haulroad	Removed
2737-4	1	North Spoil Side Access Road	Removed
2737-5	1	West Haulroad Sta. 0+00 to 57+00	A, PC1, PC2
2737-6	2	West Haulroad Sta. 57+00 to 94+97	Approved *
2737-8	2	Mine Access Road	A, C1, C2
2737-9	2	North Loop Haulroad	A, C1, C2
2737-10	2	North Extension 1	Pending

* Approved, but construction has not occurred.
A= Approved C1 = Constructed C2 = Certified
PC1 = Partially Constructed PC2 = Partially Certified