§ 779.25 Cross sections, maps, and plans.

(a) The application shall include cross sections, maps, and plans showing—

(1) Elevations and locations of test borings and core samplings;
(2) Elevations and locations of monitoring stations used to gather data for water quality and quantity, fish and wildlife, and air quality, if required, in preparation of the application;
(3) Nature, depth, and thickness of the coal seams to be mined, any coal or rider seams above the seam to be mined, each stratum of the overburden, and the stratum immediately below the lowest coal seam to be mined;
(4) All coal crop lines and the strike and dip of the coal to be mined within the proposed permit area;
(5) Location and extent of known workings of active, inactive, or abandoned underground mines, including mine openings to the surface within the proposed permit and adjacent areas;
(6) Location and extent of sub-surface water, if encountered, within the proposed permit or adjacent areas;
(7) Location of surface water bodies such as streams, lakes, ponds, springs, constructed or natural drains, and irrigation ditches within the proposed permit and adjacent areas;
(8) Location and extent of existing or previously surface-mined areas within the proposed permit area;
(9) Location and dimensions of existing areas of spoil, waste, and non-coal waste disposal, dams, embankments, other impoundments, and water treatment and air pollution control facilities within the proposed permit area;
(10) Location, and depth if available, of gas and oil wells within the proposed permit area and water wells in the permit area and adjacent area;

(b) Cross sections, maps and plans included in a permit application as required by this section shall be prepared by, or under the direction of, and certified by a qualified, registered, professional engineer, a professional geologist, or in any State which authorizes land surveyors to prepare and certify such cross sections, maps and plans, a qualified, registered, professional, land surveyor, with assistance from experts in related fields such as landscape architecture, and shall be updated as required by the regulatory authority.