SECTION 9: ENVIRONMENTAL ASSESSMENT

A. General. It shall be the responsibility of the Subdivider to submit the information required by this Section with the Subdivision application.

1. In accordance with 76-3-603, MCA, an environmental assessment must accompany the preliminary plat for a major subdivision.

2. For a first minor subdivision, a second or subsequent minor subdivision, the subdivider need only to provide a summary of the probable impacts of the proposed subdivision based on the primary review criteria established in 76-3-608(3)(a), MCA, (effects on agriculture, agricultural water user facilities, local services, the natural environment, wildlife, wildlife habitat, and public health and safety).

B. Environmental Assessment. The environmental assessment must accompany the preliminary plat and must include the required information.

1. Major Subdivision: An environmental assessment must accompany the preliminary plat and must include the following information:

   a. A description of every body or stream of surface water that may be affected by the proposed subdivision, together with available ground water information, and a description of the topography, vegetation, and wildlife use within the area of the proposed subdivision as required under the Environmental Description Contents.

   b. A summary of the probable impacts of the proposed subdivision based on the criteria described in 76-3-608, MCA, and this Section.

   c. A community impact report containing a statement of anticipated needs of the proposed subdivision for local services, including education and business; roads and maintenance; water, sewage, and solid waste facilities; fire and police protection.

   d. Additional relevant and reasonable information related to the applicable regulatory criteria adopted under these Regulations.

2. Second or Subsequent Minor Subdivision: An abbreviated environmental assessment must accompany the preliminary plat and must include the following information:

a. A summary of the probable impacts of the proposed subdivision based on the criteria described in 76-3-608 MCA, and this Section.

3. First Minor Subdivision from a Tract of Record: The first minor subdivision from a tract of record is exempt from any environmental assessment requirement (76-3-609(3), MCA).

C. Environmental Description Contents.

1. Surface Water:

a. Mapping. Locate on a plat overlay or sketch map all surface waters and the delineated floodways which may affect or be affected by the proposed subdivision including:

(1) Natural water systems such as streams, lakes, rivers, or marshes.
(2) Artificial water systems such as canals, ditches, aqueducts, reservoirs, irrigation or drainage systems.

b. Description. Describe all surface waters which may affect or be affected by the proposed subdivision including name, approximate size, present use, and time of year when water is present.

(1) Describe proximity of proposed construction (such as buildings, sewer systems, roads) to surface waters.

c. Water Body Alteration. Describe any existing or proposed streambank or shoreline alterations or any proposed construction or modification of lake beds or stream channels. Provide information on location, extent, type, and purpose of alteration. A 310 Permit from the Gallatin Conservation District shall be required for any alterations to perennial streams.

d. Wetlands. If wetlands are present, the subdivider shall provide a wetlands investigation completed by a qualified consultant, using the U.S. Army Corps of Engineers' Wetlands Delineation Manual Technical Report Y-87-1 (1987 Manual). If the investigation indicates the presence of wetlands, a wetlands delineation shall be shown on the final plat. If any construction or changes are proposed which require a 404 Permit, the subdivider shall provide evidence of such permit to the planning department.

2. Ground Water:

a. Depth. Establish the seasonal minimum and maximum depth to the water table, dates on which these depths were determined, and the location and depth of all known aquifers which may be affected by the proposed subdivision. The high water table shall be determined from tests taken during the period of major concern as specified in writing by the Health Department. Specific locations for test holes may also be determined by the Health Department.

b. Steps to Avoid Degradation. Describe any steps necessary to avoid degradation of ground water and ground water recharge areas.

3. Geology - Soils - Slopes:

a. Geologic Hazards. Identify geologic hazards affecting the proposed subdivision which could result in property damage or personal injury due to rock falls or slides; slides-land, mud, snow; surface subsidence (e.g., settling or sinking); and seismic activity.

b. Protective Measures. Explain what measures will be taken to prevent or materially lessen the danger of future property damage or injury due to any of the hazards referred to above.

c. Unusual Features. Provide a statement describing any unusual soil, topographic or geologic conditions on the property which limit the capability for building or excavation using ordinary and reasonable construction techniques. The statement should address conditions such as shallow bedrock, highwater table, unstable or expansive soil conditions, and slope. On a map identify any slopes in excess of fifteen percent (15%) grade.

d. Soils Map. The subdivision shall be overlaid on the Gallatin County Soil Survey maps obtained from the NRCS. The maps are 1:24,000 scale. These maps may be copied without permission. However, enlargement of these maps could cause misunderstanding of the detail of mapping. Soils were mapped using a minimum delineation of five acres. Soils reports were intended to alert subdividers to possible problems and the need for a more detailed on-site investigation. The subdivider shall provide the following soil reports which can be obtained for the NRCS:

(1) The physical properties and engineering indexes for each soil type.

(2) Soil limitations for sanitary facilities, building site development, and water features for each soil type.

(3) Hydric soils report for each soil type. If hydric soils are present, the subdivider shall provide a wetlands investigation by a certified consultant, using the U.S. Army Corps of Engineers' Wetlands Manual.

(4) The subdivider shall provide any special design methods planned to overcome the above limitations.

e. Cuts and Fills. Describe the location and amount of any cut or fill three or more feet in depth. These cuts and fills should be indicated on a plat overlay or sketch map.

(1) Where cuts or fills are necessary, describe any plans to prevent erosion and to promote revegetation such as replacement of topsoil and grading.

4. Vegetation:

a. Vegetation Map. On a plat overlay or sketch map:

(1) Indicate the distribution of the major vegetation types such as marsh, grassland, shrub, coniferous forest, deciduous forest, mixed forest.

(2) Identify critical plant communities such as stream bank or shoreline vegetation; vegetation on steep, unstable slopes; vegetation on soils highly susceptible to wind or water erosion.

(3) The subdivider shall have any noxious weeds identified and their location mapped by a person with experience in weed management and knowledgeable in weed identification.

b. Protective Measures. Describe measures to:

(1) Preserve trees and critical plant communities (e.g., design and location of roads, lots and open spaces).

5. Wildlife:

a. Species. Describe species of fish and wildlife which use the area affected by the proposed subdivision.

b. Critical Areas. Identify on a plat overlay or sketch map of the proposed subdivision any known critical or "key" wildlife areas,

such as big game winter range, waterfowl nesting areas, habitat for rare or endangered species, wetlands.

c. Protective Measures. Describe any proposed measures to protect or enhance wildlife habitat or to minimize degradation (e.g., keeping building and roads back from shorelines; setting aside marshland as undeveloped open space).

d. The subdivider shall discuss the impact of the proposed development on fish and wildlife with the Department of Fish, Wildlife and Parks (FWP). The subdivider shall provide a written statement outlining any recommendation of FWP and any mitigation planned to overcome any adverse impacts.

6. Historical Features:

a. Affected Areas. Describe and locate on a plat overlay or sketch map any known or possible historic, paleontological, archeological or cultural sites, structures, or objects which may be affected by the proposed subdivision.

b. Protective Measures. Describe any plans to protect such sites or properties.

c. The subdivider shall discuss the impact of the proposed development on any historic features, and the need for inventory, study and/or preservation with the State Historic Preservation Office (SHPO). The subdivider shall provide a written statement outlining any recommendations of SHPO and any plans for inventory, study and/or preservation and any mitigation planned to overcome any adverse impacts.

7. Visual Impact:

a. Measures. Describe any efforts to visually blend development activities with the existing environment (e.g., provisions for appropriate building materials, colors, road design, and underground utilities and re-vegetation or earthworks).

D. Summary of the Probable Impacts Criteria. All subdivisions must be designed so that they do not adversely impact agriculture, agricultural water user facilities, local services, the natural environment, wildlife, wildlife habitat, public health and safety, pursuant to the MSPA, or that such adverse impacts have been avoided or mitigated to the maximum extent possible.

1. The effect on agriculture and proposed mitigation of impacts. Agriculture is defined as all aspects of farming or ranching including the cultivation or tilling of soil; dairying; the production, cultivation, growing, harvesting of agricultural or horticultural commodities; raising of livestock, bees, fur-bearing animals or poultry; and any practices including, forestry or lumbering operations, including preparation for market or delivery to storage, to market, or to carriers for transportation to market. Prime agricultural lands are defined under 82-4-203 (40), MCA.

    a. Number of acres in type of production. Is the proposed subdivision or associated improvements located on or near prime farmland or farmland of statewide importance as defined by the Natural Resource Conservation Service? If so, identify each area on a copy of the preliminary plat.

    b. The productivity of the land.

    c. Whether or not the property is part of a viable farm unit. Describe whether the subdivision would remove from production any agricultural or timber land.

    d. Agricultural operations and other uses of land in the general locality.

    e. What measures will be taken, if any, to control family pets.

    f. Fencing of Agricultural Land. Describe any existing fence lines around the subdivision boundary, which protect agricultural lands under an ownership other than that of the subdivider, and describe any measures which will be taken to insure that the owners of the subdivision will share with the owner of the agricultural lands in the continued maintenance of the fence.

    g. Additional information as needed.

2. The effect on agricultural water user facilities and other water conveyance facilities and proposed mitigation of impacts. The terms *agricultural water user facility* and *water conveyance facility* are defined in Section 1 of these Regulations.

    a. Type, description, ownership, and users of facilities.

    b. Describe conflicts the subdivision would create with agricultural water user facilities and water conveyance facilities (e.g. residential development creating problems for operating and maintaining

irrigation systems) and whether such facilities would be more subject to vandalism or damage because of the subdivision.

c Describe possible nuisance problems which the subdivision would generate with regard to agricultural water user facilities and water conveyance facilities (e.g. safety hazards to residents or water problems from irrigation ditches, head gates, siphons, sprinkler systems, or other agricultural water user facilities or water conveyance facilities).

d. Where the water users and/or water conveyance facility's authorized representatives have provided the subdivider with written comments, those comments shall be submitted with the preliminary plat application.

e. Additional information as needed.

3. The effect on local services and proposed mitigation of impacts. Local services are defined as any and all services that local governments, public or private utilities are authorized to provide for the benefit of their citizens including but not limited to police, sheriff, fire, emergency, and public health services, as well as schools, busing, and roads.

a. Methods of water supply and sewage disposal.

b. Provision of law enforcement services and fire protection services, and projected costs to providers.

c. Costs of upgrading or extending off-site public roads. Costs of annual road maintenance.

d. Provision of educational services and projected costs to providers.

e. Current amount of local property taxes, projected amount land and improvements will pay in local property taxes. Who would bear these costs (e.g. all taxpayers within the jurisdiction, people within special taxing districts, or users of a service)?

f. Provision of utilities and easements.

g. Additional information as needed.

4. The effect on the natural environment and proposed mitigation of impacts. The natural environment is defined as the physical conditions which exist

within a given area, including land, air, water, mineral, flora, fauna, sound, light and objects of historic and aesthetic significance.

a. Road drainage and erosion.

b. Terrain and surface runoff effects.

c. Grading and drainage plan.

d. Effects on native vegetation, soils, quality or quantity of surface or ground waters.

e. Weed control.

f. Additional information as needed.

g. Light pollution.

h. Whether the proposed development complies with adopted County plans for parks, recreation, open space, and trails.

5. The effect on Wildlife and proposed mitigation of impacts. Wildlife are defined as those animals that are not domesticated or tame.

a. Expected effects of pets and human activity on wildlife.

b. Effects on fisheries.

c. Effects on public access to public lands, trails, hunting or fishing areas.

d. Additional information as needed.

6. The effect on Wildlife Habitat and proposed mitigation of impacts. Wildlife Habitats are defined as the place or area where Wildlife naturally lives or travels through.

a. Proximity to area of significant Wildlife Habitat or critical Wildlife areas.

b. Effects on public access to public lands, Trails, hunting or fishing areas.

c. Describe what impacts the Subdivision or associated improvements would have on Wildlife areas such as big game wintering range,

migration routes, nesting areas, Wetlands, or important habitat for rare or endangered species.

d. Additional information as needed.

7. The effect on public health and safety and proposed mitigation of impacts. Public health and safety is defined as the prevailing healthful, sanitary condition of well being for the community at large. Conditions that relate to public health and safety include but are not limited to: disease control and prevention; emergency services; environmental health; flooding, fire or wildfire hazards, rock falls or landslides, unstable soils, steep slopes, and other natural hazards; high voltage lines or high pressure gas lines; and air or vehicular traffic safety hazards.

a. Potential natural hazards; flooding, snow or rock slides, high winds, wildfire, excessive slopes, etc.

b. Potential man-made hazards; high voltage power lines, high pressure gas lines, nearby industrial or mining activity, high traffic volumes, lack of fire protection, inadequate traffic safety, etc.

c. Additional information as needed.

E. Community Impact Report Contents.

1. Water Supply:

a. Description of Use. Describe how water will be provided for household use and fire protection.

b. Capacity. Indicate the number of gallons per day of water the proposed subdivision will require and whether the water supply is sufficient to meet the needs of the anticipated, final population of the subdivision. Are there any anticipated effects on existing water systems or wells within the area?

c. State Standards. Indicate whether the plans for water supply meet the standards of MDEQ for quality, quantity and construction criteria.

d. Existing Public System. If the subdivider proposes to connect to an existing water system:

(1) Identify and describe that system.

(2) Provide written evidence that permission to connect to that system has been obtained.
(3) State the approximate distance to that system.
(4) State the cost of extending or improving the existing water system to service the proposed development.
(5) Show that the existing water system is adequate to serve the proposed subdivision.

e. New Public System. If a separate public water system is to be installed, discuss:

(1) Who is to install that system and when it will be completed.
(2) Who will administer and maintain the system at the beginning of subdivision development and when subdivision is completed.
(3) Provision of evidence that the water supply is adequate in quantity, quality, and dependability (75-6-102 MCA).

f. Individual System. If individual water systems are to be provided, describe the adequacy of supply of the ground water for individual wells or cisterns and how this was determined.

2. Sewage Disposal:

a. Method. Describe the proposed method of sewage disposal.

b. Capacity. Indicate the number of gallons of effluent per day which will be generated by the proposed subdivision at its full occupancy, whether the proposed method of sewage disposal is sufficient to meet the anticipated final needs of the subdivision and whether it meets the standards of MDEQ.

c. Existing System. If the development will be connected to an existing public sewer system, include:
(1) A description of that system and approximate distance from proposed subdivision.
(2) Written evidence that permission to connect to that system has been obtained.

d. New System. If a new public sewage disposal system, as defined under 75-6-102 MCA, is to be installed, discuss:

(1) When the system will be completed, and how it will be financed.

(2) Who is to administer and maintain the proposed system at the beginning of subdivision development and when development is completed.

3. Solid Waste Disposal:

a. Collector System. Describe the proposed system of solid waste collection and disposal for the subdivision including:

(1) Evidence that existing systems for collection and facilities for disposal are available and can handle the anticipated additional volume.
(2) A description of the proposed alternative where no existing system is available.
(3) Whether the proposed method of solid waste disposal meets the standards of MDEQ.

4. Roads:

a. Description. Describe any proposed new public or private access roads or substantial improvements of existing public or private Access Roads. Road improvements may include Trails needed to accommodate existing historic non-motorized road uses.

b. Access to Arterial. Discuss whether any of the individual lots or tracts have access directly to Arterial Roads; and if so, the reason access was not provided by means of a road within the subdivision.

c. Modification of the Existing Roads. Explain any proposed closure or modification of existing roads.

d. Dust. Describe provisions considered for dust control on roads.

e. Pollution and Erosion. Explain how road maintenance will be provided to meet MDEQ guidelines for prevention of water pollution and erosion.

f. Installation and Maintenance. Indicate who will pay the cost of installing and maintaining dedicated and private roadways.

g. Average Daily Traffic (ADT). Discuss how much ADT will be generated on existing Local, Collector and Arterial Roads, when the subdivision is fully developed.

h. Capacity. Indicate the capacity of existing and proposed roads to safely handle any increased traffic. Describe any anticipated increased maintenance that will be necessary due to increased traffic and who will pay the cost of maintenance.

i. Year-Round Access. Explain whether year-round access by conventional automobile will be available over legal rights-of-way to the subdivision and to all lots and common facilities within the subdivision.

5. Utilities:

a. Affected Utilities. Indicate whether the subdivision preliminary plat has been submitted to affected utilities for review; if so, include a copy of response.

b. Include a description of:

(1) The method of furnishing electric, natural gas or telephone service, where provided.
(2) The extent to which these utilities will be placed underground.
(3) Estimated completion of each utility installation.
(4) The subdivider shall provide a written statement from the utility companies that the proposed subdivision can be provided with service.

6. Emergency Services:

a. Describe the emergency services available to the subdivision such as:

(1) Fire Protection. Is the proposed subdivision in an urban or rural fire district? If not, will one be formed or extended? In absence of a fire district, what fire protection procedures are planned?
(2) Police protection.
(3) Ambulance service.
(4) Medical services.

b. Give the estimated response time of the above services.

c. Can the needs of the proposed subdivision for each of the above services be met by present personnel and facilities?

(1) If not, what additional expense would be necessary to make these services adequate?

(2) At whose expense would the necessary improvements be made?

(3) Indicate whether the subdivision preliminary plat has been submitted to affected above agencies; if so, include copy of response.

(4) The subdivider shall discuss the impact of the proposed development on the provision of emergency services with each of the providers. The subdivider shall provide a written statement outlining the recommendations of the providers and any mitigation planned to overcome any inability to provide services or adverse impacts.

7. Schools:

a. Available Facilities. Describe the available educational facilities which would service this subdivision.

b. School Children. Estimate the number of school children that will be generated from the proposed subdivision.

c. The subdivider shall discuss the impact of the proposed development on the provision of educational services with the administrator(s) of the appropriate school system(s). The subdivider shall provide a written statement outlining whether the increased enrollment can be accommodated by the present personnel and facilities and by the existing school bus system, any recommendations of the administrator(s), and any mitigation planned to overcome any adverse impacts of the proposed development on the provision of educational services.

8. Land Use:

a. Planning. Describe comprehensive planning and/or land use regulations covering the proposed subdivision or adjacent land and if located near the jurisdictional area of an incorporated city or town, whether annexation is proposed.

b. Public Lands. Describe how the subdivision will affect access to any public lands. Where public lands are adjacent to or near the proposed development, describe present and anticipated uses for those lands; (e.g., grazing, logging, recreation, etc.).

c. Adjacent Land Use. Describe the effect of the subdivision on adjacent land use.

d. Hazards. Describe any health or safety hazards on or near the subdivision, such as mining activity or potential subsidence, high pressure gas lines, dilapidated structures or high voltage power lines. Any such conditions should be accurately described and their origin and location identified. List any provisions that will be made to mitigate these hazards.

e. Nuisance. Describe any on-site or off-site land uses creating a nuisance, such as unpleasant odors, unusual noises, dust or smoke.

9. Housing:

a. Indicate the proposed use(s) and number of lots or spaces in each:

_____ Residential, single family.

_____ Residential, multiple family. Types of multiple family structures and numbers of each (e.g., duplex, four-plex).

_____ Planned Unit Development (number of units).

_____ Condominium (number of units).

_____ Mobile or Manufactured Home Park.

_____ Recreation Vehicle Park.

_____ Commercial or Industrial.

_____ Other (please describe).

b. Is the subdivision planned as a second home or recreational subdivision?

10. Parks and Recreation Facilities:

a. Describe park and recreation facilities to be provided within the proposed subdivision and other recreational facilities which will serve the subdivision.

b. Describe trail facilities to be provided within the proposed subdivision. Trails should connect with parks, trails and recreation

facilities in accordance with the then current Trails Plan where applicable.

11. Taxation:

a. Acreage. Include a list of the number of acres in each land assessment classification prior to subdivision.

b. Existing Taxes. Describe any existing tax and existing or proposed special assessments which will affect the subdivision.

c. Anticipated Taxes. Estimate the increased amount of taxes that will be generated by the subdivision at full development using existing valuations and mill levies. Estimate the increases costs of all public services, including schools, at full subdivision buildout.

12. Accessibility of Service Systems and Facilities: Provide total distances over road types to each of the following:

	Unimproved	Graded	Graveled	Paved	Total	Town Where Located
Fire Protection						
Police Protection						
Hospital Facilities						
Elementary School						
High School						

F. Traffic Impact Study (TIS).

1. Purpose. The purpose of a TIS is to identify any traffic impacts resulting from a proposed Subdivision and to determine the need for improvements to the Transportation System to reasonably mitigate the impacts

2. Applicability. A TIS shall be prepared for any Subdivision that generates 500 Average Daily Traffic (ADT) or more (see Section 7.C.13. for calculation of ADT). A TIS shall be prepared by or under the direction of an Engineer in coordination with the County and/or MDT.

3. Scope of Work. The scope of work for a TIS shall be developed by an Engineer in coordination with the County and/or MDT prior to commencement of work. The scope of work shall be submitted with the pre-application submittal for review by the County and/or MDT. The scope of work at a minimum shall include the following.

a. Study Area. The geographic study area for the TIS shall be determined by an Engineer in coordination with the County and/or MDT. Some general guidelines include the following:
   - All site access points to the Subdivision; and
   - All intersections of Arterials and/or Collector roads within one mile of the Subdivision;
   - Intersections of Arterials and/or Collector roads beyond the one mile area if they may be significantly impacted by the Subdivision. Significant impacts may include but are not limited to significant increase of additional peak hour trips and/or decrease in the current or projected LOS.

b. Analysis Period. The TIS shall include an operations analysis performed for the weekday a.m. and p.m. peak hour at the Study Area intersections. However, the County and/or MDT may require certain Subdivisions to study other peak traffic hour times due to land uses that may generate other peak traffic hour times.

c. Study Time Frames. The TIS shall include at minimum:
   - Existing conditions shall date from no more than one year from the date sufficiency is determined for the preliminary plat.
   - Expected conditions at completion year of the Subdivision or each phase of a phased Subdivision, including background traffic projections for the expected completion year. Background traffic projections shall account for nearby Subdivisions with preliminary or final plat approval that have not yet built out (as identified by the County) and/or the application of an appropriate growth rate.

4. Minimum TIS Requirements. The study requirements for a TIS are:

   - Vicinity map showing the location of the project in relation to the Transportation System of the area;
   - Description of the proposed Subdivision, surrounding land uses, and existing, adopted Transportation Plans affecting the study area;
   - Trip generation forecast using data from the most recent edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual* unless more appropriate data is available and approved by the County and/or MDT;
   - Trip distribution assumptions based on historical data, existing and future travel characteristics, and capacity constraints;
   - Existing traffic volumes;
   - Existing and future LOS, average vehicle delay and volume/capacity ratios (V/C) for all intersections and road

sections within the Study Area for conditions with and without the proposed project;

- Forecast traffic volumes with and without the Subdivision;
- Safety analysis of the site access, including sight distance and operation characteristics;
- Analysis of right and left turn lane warrants (MDT standards);
- Analysis of parking needs of the proposed Subdivision;
- An objective analysis based recommendation regarding further analyses, including warrants for traffic control devices; and
- Findings and conclusions including a recommendation of suggested mitigation for off-site impacts and an evaluation of the effectiveness of that mitigation.

5. Peer Reviewer. All TISs shall be reviewed by a traffic Engineer or a transportation planner decided upon by the County.

   a. All fees shall be based upon the peer's review of the TIS for compliance with industry accepted traffic methodologies and existing Gallatin County Plans and Regulations.

   b. All fees for the peer review process shall be paid by the Subdivider.

   c. An estimate of the fee required for the peer review process will be provided by the County upon submittal of the preliminary plat application. The review fee shall not exceed $1,000.

   d. All proposed Subdivisions on the Montana Highway System shall be reviewed by the MDT for sufficiency and approval.

   e. The peer review for the TIS shall be completed within the time allotted for the preliminary plat review period.

6. Waiver of Study Requirements. Upon the written request of the Subdivider, the requirement for a TIS, or the study elements listed in Minimum TIS Requirements, may be waived or modified by the County and/or MDT. The Subdivider shall document the reasons for the requested waiver or modification. Factors to be considered include but are not limited to:

   a. Roadway improvements scheduled that are expected to mitigate any impacts associated with the proposed project.

b. A similar TIS was previously prepared for the site and is still considered applicable.