MISSOULA
PUBLIC WORKS • STORM WATER UTILITY
435 RYMAN ST • MISSOULA, MT 59802-4297 • (406) 552-6358

rev. July 15, 2020

Erosion Control Site Plan Checklist

Date: _____

Project Name: _____

Address: _____ **Zip Code:** _____

Project Area (acres or square feet): _____ **Disturbance Area (acres or square feet):** _____

Owner Name: _____ **Phone Number:** _____

Owner Address: _____

In compliance with the Clean Water Act and the National Pollutant Discharge and Elimination System permit program—administered by the Montana Department of Environmental Quality as authorized by the U.S. Environmental Protection Agency—the City of Missoula is required to regulate runoff and the treatment of storm water into drainage systems and waterbodies, including the Missoula aquifer. The regulation of storm water includes construction storm water from project sites (Montana Code Annotated 75-5-401). Projects that involve 1 acre or more of land disturbance, or less than one acre but are part of a larger common plan of development, are required to demonstrate coverage under the Montana Pollutant Discharge and Elimination System General Permit for Storm Water Discharges Associated with Construction Activity.

Evaluated by: **Department/Division:**

A complete Erosion Control Site Plan shall include the following (as applicable to the site and project).

			Delineation of Work Area
City	**Applicant**	**NA**	Separate plan sheets are required to show the measures to be implemented at the grading stage (e.g., grading, foundation/retaining walls) and at the construction stage.
			Show all areas of construction, including but not limited to: areas to be graded as shown on a grading plan, areas to be cleared, as well as structures, retaining walls, roads, drives, utilities, trenches, scaffolds, catch basins, etc. These areas should be consolidated and located outside steep or sensitive areas.
			Show boundary lines of the entire site and vicinity of the site relative to surrounding areas. Use appropriate scale to show adequate level of detail and show north arrow.
			The location of all existing buildings, structures, easements, or underground utilities.
			Accurate contours showing the topography of the existing ground extending at least 10 feet outside all boundary lines of the project site. The contour lines shall be at intervals sufficient to show the configuration of the ground before disturbance.
			Location, width, direction of flow and approximate location of top and toes of banks of any waterbodies.
			Protect surface water locations, providing primary control measures (e.g., silt fence along outer buffer zone of creek; do not disturb riparian areas) and secondary control measures (e.g., fiber rolls) in disturbed areas sloping toward a waterbody.

City	Applicant	NA	
			Delineation of Work Area (continued)
			Protect storm drain inlets using fiber rolls, permeable rock sacks, or other measures that keep sediment from entering the drain. Show inlet locations and protection measure details. Include that filter fabric or filter baskets shall be installed in the drains and cleaned out after each rain event, or as needed, to function properly. Do not use sand bags, as these tear and can result in sand entering the storm drains.
			Location and types of existing vegetation on the site. Within 25 feet of any cut or fill, the plan shall identify the location, diameter, species, and appropriate elevation at the base of all trees over 12 inches in diameter measured at 4.5 feet above ground level.
			Maximize and protect areas to be undisturbed (including sensitive areas and buffer zones), using a vegetative buffer strip or 6-foot fence/barrier. Show the "limits of work" and barriers along the "limit". Forbid work, storage, earth moving, vegetation clearing, and other disturbances outside of the "limit". Do not use hay bales as these can easily fall apart.
			Prevent runoff to off-site areas using perimeter controls (diversion berms, silt fencing, and/or fiber rolls). Silt fencing is preferred, but fiber rolls may work in some instances. Where the site is flat or the slope is gentle, installing these measures on the property line should be adequate. On slopes greater than 3:1, the measures must be installed along contour lines.
			Prevent Erosion of Unstable or Bare Areas
			Areas of the site currently experiencing or susceptible to erosion problems.
			Existing drainage patterns and direction of flow.
			Show all areas that will be used for stockpiling earth and storing construction materials.
			Indicate the location and method for stabilizing disturbed bare earth areas. Use seeding and/or mulching and the following, as necessary: i) For slopes less than 3:1, provide silt fencing or fiber rolls along contour lines. ii) For slopes greater than 3:1, anchored erosion blankets (rice, straw, or coconut) and fiber rolls or silt fencing at the crest are required. Jute netting is preferred when used with seeding.
			Use diversion berms to divert water from unstable or denuded areas (e.g., top and base of a disturbed slope, grade breaks where slopes transition to a steeper slope).
			Direct water from construction areas to designated temporary filtration/detention areas. Show any temporary detention areas for storm water and stabilization of those areas.
			Location and details of all proposed drainage systems, walls, cribbing, or other erosion protection devices to be constructed in connection with, or as a part of, the proposed work.
			Location of proposed vegetative erosion control measures (e.g., temporary and final seeding and landscaping), including type, quantity, planting schedule, and irrigation.
			Show Locations of Logistics Areas
			Show location of office trailer(s), storage sheds, temporary power pole, scaffold footprint, and other temporary installations. Show how they will be accessed and show protection of the access routes.
			Show location of utility trenches, indicate utility types, and identify timing of installation.
			Construction Access Routes
			Use stabilized designated access points for entrance onto the property. If using an existing paved driveway, identify it. Where vehicles or equipment will travel from an existing paved driveway to unpaved areas within the property, a stabilized transition point is required.
			Provide designated area(s) for parking of construction vehicles, using aggregate over geo-textile fabric.

City	Applicant	NA	
			Construction Access Routes (continued)
			Show all access roads/ramps and access points used by excavation equipment, trucks, or fork lifts/crane access (second floor construction). For unpaved routes, use ridges running diagonally across the road that run to a stabilized outlet. The type of materials used for stabilization and their locations shall be indicated. Materials for this purpose are required to be stored on-site.
			Containment of Construction Materials and Waste
			Show location, installation, and maintenance of a concrete mixer, washout, and pits. No concrete, mortar, or stucco washout shall be placed directly on the soil/ground. Specify the method used to contain the washout.
			Show location of portable toilets away from surface water locations and storm drain inlets.
			Show storage location and containment of construction materials during work, as well as afterhours/weekends. Show the location of lumber, gravel, and materials storage areas. Show how they will be accessed and show protection of the access routes.
			Show areas and proposed protection of temporary stockpiles using anchored-down plastic sheeting in dry weather. Alternatively, in wet weather, or for longer storage, use seeding and mulching, soil blankets, or mats.
			Indicate the location of refuse piles and debris box locations. Show how they will be accessed and show protection of the access routes.
			Construction Schedule
			Provide an anticipated construction schedule and/or construction duration (in weeks or months).
			Add the Following Standard Comments
			Point of contact. (Please provide a point of contact including name, title/qualification, email, and phone number. The point of contact will be the City's main point of contact if corrections are required).
			Perform clearing and earth-moving activities only during dry weather. Measures to ensure adequate erosion prevention and sediment control shall be installed prior to earth-moving activities and construction.
			Measures to ensure adequate erosion prevention and sediment control are required year-round. Stabilize all denuded areas and maintain erosion prevention measures continuously between from March 1 through November 1.
			Store, handle, and dispose of construction materials and wastes properly, to prevent their contact with storm water. No materials shall be stored on the street.
			Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water, or sediments, and non-storm water discharges to storm drains and watercourses.
			Use sediment controls or filtration to remove sediment when dewatering site and obtain federal and state permits, as necessary.
			Avoid cleaning, fueling, or maintaining vehicles on site, except in a designated area where wash water is contained and treated. Limit and time applications of pesticides and fertilizers to prevent polluted runoff.
			Limit construction access routes to stabilized, designated access points.
			Avoid tracking dirt or other materials off site; clean off-site paved areas and sidewalks using dry sweeping methods.
			Train and provide instruction to all employees and subcontractors regarding the current version of the Montana Department of Environmental Quality Field Guide for Best Management Practices.
			Placement of erosion prevention materials at these locations is required on weekends and during rain events: (List locations)

			Standard Comments (continued)
City	**Applicant**	**NA**	The areas delineated on the plans for parking, grubbing, storage, etc., shall not be enlarged or "run over."
			Construction sites are required to have erosion prevention and sediment control materials on site during the "off-season."
			Erosion prevention and sediment control materials shall be stored on site.
			Tree protection shall be in place before any demolition, grading, excavating, or grubbing is started.

Notes