RICHARDSON INSPECTION SERVICES, LLC

STORM WATER MANAGEMENT SMALL PROJECTS APPLICATION

AND WORKSHEET

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Municipality \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ County: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Site Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Owner: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mailing Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone #. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Cell # \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Project analysis questions:**

1. Is your property subject to any flooding or does it have a high water table? \_\_\_\_\_\_\_\_\_\_
2. Are there any water features on the property…streams, ponds, etc.? \_\_\_\_\_\_\_\_\_\_
3. Are there any natural drainage features, ie…depressions, swales, etc.? \_\_\_\_\_\_\_\_\_\_
4. Describe the existing landscape…meadow, wooded, rocky scrub . \_\_\_\_\_\_\_\_\_\_
5. Describe the topography of the site…flat, gentle, moderate or steep slope. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Describe the soils and their permeability…poorly drained, well drained, sand, clay, gravel, or any
combination of the above \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Are you installing an impermeable driveway, ie…paved or concrete? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The Small Projects Application was designed to assist individuals constructing improvements of impervious surfaces (surfaces that do not infiltrate water, i.e. rooftops driveways, sidewalks, etc.) a method for determining if control measures are required to be implemented to comply with the SWM Ordinance.

Step 1: Determine the length (in feet) and width (in feet) of the proposed improvement and insert into the “Length” and “Width” columns under the respective “Surface Type.” If the “Surface Type” is not listed use “Other” and list the improvement type. Irregular surfaces will require additional mathematical equations not listed in the application or the examples.

Step 2: Multiply the length times the width and insert that number into the “Impervious Area (ft2)” column. This number will be in square feet.

Step 3: Add the numbers in the “Impervious Area (ft2)” column and insert the total number of square feet in the “TOTAL IMPERVIOUS AREA” box.

Step 4: If the “TOTAL IMPERVIOUS AREA” is:

2,500 square feet or less your project is exempt and you can proceed with construction as planned (see Example #1),

2,500 square feet to 5,000 square feet you are required to submit the application to the municipality, along with details on how you will manage the increase in runoff (implement volume controls) (see Example #2)

5,000 square feet or more your project requires a SWM Plan prepared by a Pennsylvania Registered Design Professional experienced in the design of such control measures and to the requirements of the Stormwater Management Ordinance.

Step 5: If credit will be taken for DIA (Disconnected Impervious Area), list the “Qualifying Surfaces” obtain the square footage of the impervious area by multiplying the length times the width (see Example #2).

Step 6: Subtract the “DIA CREDITS” from the “TOTAL IMPERVIOUS AREA” and insert this number in the “TOTAL AREA TO BE MANAGED BY BMP’S” box.

Step 7: Multiply the number in the “TOTAL AREA TO BE MANAGED BY BMP’S” box by 0.20 (20 %) and insert that number into the “SURFACE AREA OF BMP’S (ft2) ” box. This number will be in square feet

**SMALL PROJECT APPLICATION SWM PLAN WORKSHEET**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Surface Type-Description** | **Length** | x | **Width** | = | **Impervious Area (ft²)** |
| Building |  | x |  | = |  |
|   |   | x |   | = |   |
| Garage |  | x |  | = |  |
|   |   | x |   | = |   |
| Driveway |  | x |  | = |  |
|   |   | x |   | = |   |
| Other Parking Areas |   | x |   | = |   |
|   |   | x |   | = |   |
| Patios or Sidewalks |   | x |   | = |   |
|   |   | x |   | = |   |
| Other |   | x |   | = |   |
|   |   |   |   |   |   |
| **"TOTAL IMPERVIOUS AREA"**   | = |  |
| *If the* **"TOTAL IMPERVIOUS AREA"** *is 2,500 Square Feet or less your project is exempt.*  |
|   |  |  |  |  |   |
| *If the* **"TOTAL IMPERVIOUS AREA"** *is 2,500 Square Feet to 5,000 Square Feet your project* |
|  *requires this Small Project Application be submitted to the municipality and Volume Controls* |
|  *must be installed to meet the requirements of the***"SURFACE AREA OF BMP's REQUIRED."** |
|  |  |  |  |  |  |
| *If the* **"TOTAL IMPERVIOUS AREA"** *is greater than 5,000 Square Feet your project requires a* |
|  *Stormwater Management Plan prepared by a Pennsylvania Registered Design Professional* |
|  *experienced in the design of such control measures and to the requirements of the* |
|  *Stormwater Management Ordinance.*  |  |  |  |  |
| **REQUIREMENTS FOR USE OF Disconnected Impervious Area (DIA) CREDITS** |
| 1. ***Rooftop area*** *draining to a downspout*  *must be 500 sq. ft. or less,**2. Discharge must be to an area with positive slope of 5% (one foot of fall per twenty* *feet of length, 20:1) or less, and a**3. Minimum distance of 75-feet from a watercourse or down slope property line.*  | *1.* ***Paved area*** *(drives) draining to a point must be 1000 sq. ft. or less,**2. Discharge must be to a gravel strip or spreading device, and the**3. Flow length of the pervious surface must be greater than or equal to the contributing length.* |
| **DIA CREDITS TO BE SUBTRACTED FROM "TOTAL IMPERVIOUS AREA"** |
| **Qualifying Surfaces** | **Length**  | x | **Width** | = |   |
|  |  | x |  | = |  ***-*** |
|  |  | x |  | = |  ***-*** |
|  |   | x |   | = |  **-** |
|   |   | x |   | = |  **-** |
| **TOTAL AREA TO BE MANAGED BY BMP'S** | = |  |
| **20% CONVERSION TO BMP** | x | 0.20 |
| **"SURFACE AREA OF BMP'S REQUIRED" (ft2)** | = |  |

**SMALL PROJECT APPLICATION SWM PLAN WORKSHEET**

**EXAMPLE #1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Surface Type-Description** | **Length** | x | **Width** | = | **Impervious Area (ft²)** |
| Building |  | x |  | = |  |
|   |   | x |   | = |   |
| Garage | *30'-0"* | x | *18'-0"* | = | *540* |
|   |   | x |   | = |   |
| Driveway | *31'-0"* | x | *10'-0"* | = | *310* |
|   |   | x |   | = |   |
| Other Parking Areas |   | x |   | = |   |
|   |   | x |   | = |   |
| Patios or Sidewalks |   | x |   | = |   |
|   |   | x |   | = |   |
| Other |   | x |   | = |   |
|   |   | x |   | = |   |
| **"TOTAL IMPERVIOUS AREA"**   | = | *850* |
| *If the* **"TOTAL IMPERVIOUS AREA"** *is 2,500 Square Feet or less your project is exempt.*  |
|   |  |  |  |  |   |
| *If the* **"TOTAL IMPERVIOUS AREA"** *is 2,500 Square Feet to 5,000 Square Feet your project* |
|  *requires this Small Project Application be submitted to the municipality and Volume Controls* |
|  *must be installed to meet the requirements of the***"SURFACE AREA OF BMP's REQUIRED."** |
|  |  |  |  |  |  |
| *If the* **"TOTAL IMPERVIOUS AREA"** *is greater than 5,000 Square Feet your project requires a* |
|  *Stormwater Management Plan prepared by a Pennsylvania Registered Design Professional* |
|  *experienced in the design of such control measures and to the requirements of the* |
|  *Stormwater Management Ordinance.*  |  |  |  |  |
| **REQUIREMENTS FOR USE OF Disconnected Impervious Area (DIA) CREDITS** |
| 1. ***Rooftop area*** *draining to a downspout*  *must be 500 sq. ft. or less,**2. Discharge must be to an area with positive slope of 5% (one foot of fall per twenty* *feet of length, 20:1) or less, and a**3. Minimum distance of 75-feet from a watercourse or down slope property line.*  | *1.* ***Paved area*** *(drives) draining to a point must be 1000 sq. ft. or less,**2. Discharge must be to a gravel strip or spreading device, and the**3. Flow length of the pervious surface must be greater than or equal to the contributing length.* |
| **DIA CREDITS TO BE SUBTRACTED FROM "TOTAL IMPERVIOUS AREA"** |
| **Qualifying Surfaces** | **Length**  | x | **Width** | = |   |
|  |  | x |  | = |  **-** |
|  |  | x |  | = |  **-** |
|  |   | x |   | = |  **-** |
|   |   | x |   | = |  **-** |
| **TOTAL AREA TO BE MANAGED BY BMP'S** | = | *0* |
| **20% CONVERSION TO BMP** | x | 0.20 |
| **"SURFACE AREA OF BMP'S REQUIRED" (ft2)** | = | *0* |

**SMALL PROJECT APPLICATION SWM PLAN WORKSHEET**

**EXAMPLE #2**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Surface Type-Description** | **Length** | x | **Width** | = | **Impervious Area (ft²)** |
| Building *(Barn)* | *40'-0"* | x | *30'-0"* | = | *1,200* |
|   |   | x |   | = |   |
| Garage | *30'-0"* | x | *25'-0"* | = | *750* |
|   |   | x |   | = |   |
| Driveway | *41'-0"* | x | *20'-0"* | = | *820* |
|   |   | x |   | = |   |
| Other Parking Areas |   | x |   | = |   |
|   |   | x |   | = |   |
| Patios or Sidewalks |   | x |   | = |   |
|   |   | x |   | = |   |
| Other |   | x |   | = |   |
|   |   | x |   | = |   |
| **"TOTAL IMPERVIOUS AREA"**   | = | *2,770* |
| *If the* **"TOTAL IMPERVIOUS AREA"** *is 2,500 Square Feet or less your project is exempt.*  |
|   |
| *If the* **"TOTAL IMPERVIOUS AREA"** *is 2,500 Square Feet to 5,000 Square Feet your project* |
|  *requires this Small Project Application be submitted to the municipality and Volume Controls* |
|  *must be installed to meet the requirements of the***"SURFACE AREA OF BMP's REQUIRED."** |
|  |
| *If the* **"TOTAL IMPERVIOUS AREA"** *is greater than 5,000 Square Feet your project requires a* |
|  *Stormwater Management Plan prepared by a Pennsylvania Registered Design Professional* |
|  *experienced in the design of such control measures and to the requirements of the* |
|  *Stormwater Management Ordinance.*  |  |  |  |  |
| **REQUIREMENTS FOR USE OF Disconnected Impervious Area (DIA) CREDITS** |
| 1. ***Rooftop area*** *draining to a downspout*  *must be 500 sq. ft. or less,**2. Discharge must be to an area with positive slope of 5% (one foot of fall per twenty* *feet of length, 20:1) or less, and a**3. Minimum distance of 75-feet from a watercourse or down slope property line.*  | *1.* ***Paved area*** *(drives) draining to a point must be 1000 sq. ft. or less,**2. Discharge must be to a gravel strip or spreading device, and the**3. Flow length of the pervious surface must be greater than or equal to the contributing length.* |
| **DIA CREDITS TO BE SUBTRACTED FROM "TOTAL IMPERVIOUS AREA"** |
| **Qualifying Surfaces** | **Length**  | x | **Width** | = |   |
| *Barn roof downspout #1* | *20'-0"* | x | *15'-0"* | = | *-300* |
| *Barn roof downspout #2* | *20'-0"* | x | *15'-0"* | = | *-300* |
|   |   | x |   | = |  **-** |
|   |   | x |   | = |  **-** |
| **TOTAL AREA TO BE MANAGED BY BMP'S** | = | *2,170* |
| **20% CONVERSION TO BMP** | x | 0.20 |
| **"SURFACE AREA OF BMP'S REQUIRED" (ft2)** | = | *434* |

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