

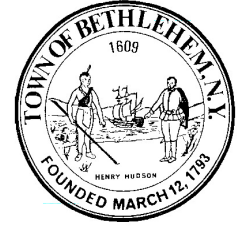
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# TOWN OF BETHLEHEM

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## GREEN INFRASTRUCTURE STORMWATER MANAGEMENT PRACTICE SELECTION MATRICES FORM

**Instructions:** This form shall be used in concert with the Town's SMP Selection Matrices Form for the appropriate pre-planning and selection of a project's stormwater management systems. The following green infrastructure techniques are to be used in concert with standard SMPs in order to achieve the required Runoff Reduction Volume (RRv). All SWPPPS submitted that are required to provide RRv must clearly outline the 5 step process for stormwater site planning and practice selection as outlined in the New York State Stormwater Management Design Manual, Chapter 3, Section 3.6. In developing this matrix, the presumption is that the technique(s) will provide RRv for and within the area(s) of the corresponding land use and is the basis of the Town's determination of appropriateness.

|                      |                  |              |
|----------------------|------------------|--------------|
| <b>Project Name:</b> | <b>Preparer:</b> | <b>Date:</b> |
|----------------------|------------------|--------------|

*Circle the applicable technique(s) for each applicable land use(s)*

| Land Use Selection Matrix                     |                                       |                              |   |                                   |                                       |                             |                                     |
|---|---------------------------------------|------------------------------|---|-----------------------------------|---------------------------------------|-----------------------------|-------------------------------------|
| Green Infrastructure Technique                | Public Roads or R.O.W. <sup>(1)</sup> | Private Roads <sup>(2)</sup> | Parking Lots / Sidewalks <sup>(3)</sup> | Single Family Lots <sup>(4)</sup> | Other Residential Lots <sup>(5)</sup> | Common Areas <sup>(6)</sup> | Non-Residential Lots <sup>(7)</sup> |
| Conservation of Natural Areas                 | NA                                    | NA                           | NA                                      | D                                 | Y                                     | Y                           | Y                                   |
| Sheetflow to Riparian Buffers / Filter Strips | NA                                    | NA                           | NA                                      | D                                 | Y                                     | Y                           | Y                                   |
| Vegetative Swales                             | D                                     | Y                            | Y                                       | NA                                | NA                                    | Y                           | Y                                   |
| Tree Plantings / Tree Pits                    | D                                     | Y                            | Y                                       | NA                                | NA                                    | Y                           | Y                                   |
| Disconnect Rooftop Runoff                     | NA                                    | NA                           | NA                                      | D                                 | Y                                     | Y                           | Y                                   |
| Stream Day-lighting                           | NA                                    | NA                           | NA                                      | D                                 | Y                                     | Y                           | Y                                   |
| Rain Gardens                                  | NA                                    | NA                           | NA                                      | D                                 | Y                                     | Y                           | Y                                   |
| Green Roofs                                   | NA                                    | NA                           | NA                                      | D                                 | Y                                     | Y                           | Y                                   |
| Stormwater Planters                           | NA                                    | NA                           | NA                                      | D                                 | Y                                     | Y                           | Y                                   |
| Rain Barrels & Cisterns                       | NA                                    | NA                           | NA                                      | D                                 | Y                                     | Y                           | Y                                   |
| Porous Pavement                               | N                                     | Y                            | Y                                       | D                                 | Y                                     | Y                           | Y                                   |

**Key:**

Y = Yes, Acceptable option in most cases based upon land use.  
D = Depends – Suitable under certain conditions, must consult Town prior to advancing design.  
N = No – Seldom or never suitable technique based upon land use.  
NA = Not Applicable - Technique not suitable for RRv for the land use based on the NYSDEC selection criteria.

Visit the Town of Bethlehem Website at <http://www.townofbethlehem.org>

Foot Notes:

- (1) If it is proposed to use any of the noted green techniques within a Town right of way, it must be demonstrated their inclusion will not alter the horizontal or vertical locations of any other utilities within the right of way or modify any other dimensional requirements of the right of way. Further, the design must demonstrate that alternate practices cannot be feasible used elsewhere within the project to meet the minimum RRv for the project based upon site soil types.
- (2) Land use generally includes the approximate areas paralleling a private road or roads similar in nature to a town road, with the sole exception of final ownership.
- (3) Land use generally includes parking areas, sidewalks and other impervious areas (excluding physical buildings).
- (4) Land use is limited to single family detached units located on a single tax parcel. All practices require prior review and approval by the Town prior to submission of a formal application to the Town Planning Department.
- (5) Land use includes single family attached units, condominiums, townhomes, or apartment complexes. The residential unit(s) or buildings do not necessary need to reside on a single tax parcel. When the residential unit is on an individual tax parcel (i.e. townhome with zero lot lines) and the exterior areas are not under a common ownership of an association, the Town may classify the project as a Single Family Lot for the purpose of Green Infrastructure Technique selection. Instances of a mixed use within a single building, land use may be classified as Non-residential. Consult the Town in both of these instances for direction on the land use classification and appropriate technique(s).
- (6) Land use includes open lands associated with a project that includes limited impervious areas (such as impervious trails, buildings) that require RRv. In instances that all or portions of the open lands are to be conveyed to the Town, consult the Town as to which techniques are acceptable.
- (7) Land use includes all others not explicitly defined. The non-residential unit(s) or buildings do not necessarily need to reside on a single tax parcel.

**Identify the Selected Green Infrastructure Technique(s):**

*For each preferred technique state the land use it will be used for. Then identify a potential alternate (if necessary) to each preferred listed.*

| <b><i>Preferred:</i></b> | <b><i>Alternate:</i></b> |
|--------------------------|--------------------------|
|                          |                          |
|                          |                          |
|                          |                          |
|                          |                          |

**Town of Bethlehem Basis for Developing Matrices:**

The Town of Bethlehem has developed the Green Infrastructure Matrices for the purpose of assisting applicant's during the pre-planning stages of their land development projects.

Land uses and the Town's determination of a technique's appropriateness for use is based on several factors such as:

- (1) Party(s) responsible for long term operation and maintenance of the technique(s).
- (2) Potential additional enforcement responsibility of Town staff to ensure that long term operation and maintenance is carried out by the responsible party(s).
- (3) Ability for Town staff to appropriately operate and maintain the techniques if they are intended for conveyance to the Town.

Land uses and corresponding techniques that have been determined as "D – Depends" are based upon each project's metrics. The Town will make final determination on acceptance of all "D" techniques based upon the above factors with additional consideration of limited resources (both staff and operating budgets) to monitor and enforce long term operation and maintenance when reviewing such projects/techniques.

Land uses and corresponding techniques that have been determined as "N – No" are based upon each project's metrics. The Town has determined that the technique if implemented has the potential of placing an undue burden on the Town's limited resources (staff, equipment and operating budgets) to carry out long term operation and maintenance if they were accepted as Town infrastructure.