

Project Name: \_\_\_\_\_ Date: \_\_\_\_\_

Preparer: \_\_\_\_\_

### E&S Plan Checklists:

These checklists are intended to be of assistance in preparing and approving E&S plans, and serve as a reminder of major items that typically need to be considered when developing the plan. (ref. 2002 CT E&S Guidelines - DEP Bulletin 34)

## 1. Narrative

- 1.1.  Purpose and description of project
- 1.2.  Estimates of the total area of the project site and the total area of the site that is expected to be disturbed by construction activities.
- 1.3.  Identification of site-specific erosion or sediment control concerns and issues.
- 1.4.  The phases of development if more than one phase is planned.
- 1.5.  The planned start and completion dates for each phase of the project.
- 1.6. Either provide or identify where in the E&S plan the following information is found:
  - 1.6.1.  The design criteria, construction details and maintenance program for the erosion and sediment control measures to be used,
  - 1.6.2.  The sequence of major operations within each phase, such as installation of erosion control measure, clearing, grubbing, excavation, grading, drainage and utility installation, temporary stabilization, road base, paving for roadways and parking areas, building construction, permanent stabilization, removal of temporary erosion measures
  - 1.6.3.  The time (in days) required for the major operations identified in the sequence
- 1.7.  Identify other possible local, state and federal permits required
- 1.8.  Identify the conservation practices to be used.
- 1.9.  A listing of all other documents to be considered part of the E&S plan (e.g. reports of hydraulic and hydrologic computations, boring logs, test pit logs, soils reports, etc.)

## 2. Support Documents (as may be needed to support Engineering Designs)

### 2.1. Hydraulic Calculations

- 2.1.1.  Size and locations of existing and planned channels or waterways with design calculations and construction details.
- 2.1.2.  Existing peak flows with calculations
- 2.1.3.  Planned peak flows with calculations
- 2.1.4.  Changes in peak flows
- 2.1.5.  Off-site effects of increased peak flows or volumes
- 2.1.6.  Design calculations and construction details for engineered measures used to control off-site erosion caused by the project
- 2.1.7.  Design calculations and construction details for engineered measures used to control erosion below culverts and storm sewer outlets
- 2.1.8.  Design calculations and construction details for engineered measures used to control groundwater, i.e. seeps, high water table, etc.

2.2.  Boring Logs, test pit logs, soil reports, etc.

## 3. Site Drawing(s) Checklist

### 3.1. Jurisdictional Features Required on All Maps or Drawings

- 3.1.1.  North arrow
- 3.1.2.  scale (including graphical scale)
- 3.1.3.  A title block containing the name of the project, the author of the map or drawing, the owner of record for the project, date of drawing creation and any revision dates
- 3.1.4.  Property lines
- 3.1.5.  Legend identifying the symbols used
- 3.1.6.  For plans containing E&S measures which require an engineered design, the signature and seal of a professional engineer licensed to practice in Connecticut

### 3.2. *Site Locus Map*

- 3.2.1.  Scale (1:24000 recommended)
- 3.2.2.  Project location (show property boundaries and at least the area that is within 1000 feet of the property boundaries)
- 3.2.3.  Roads, streets/buildings
- 3.2.4.  Major drainage ways (at least named watercourses)
- 3.2.5.  Identification of any public drinking water supply watershed area

### 3.3. *Topography, Natural Features, and Regulatory Boundaries*

- 3.3.1.  Existing contours
- 3.3.2.  Planned grades and elevations
- 3.3.3.  Limits of cuts and/or fills
- 3.3.4.  Soils, bedrock
- 3.3.5.  Seeps, springs
- 3.3.6.  Inland wetlands boundaries
- 3.3.7.  FEMA identified floodplains, floodways and State established stream encroachment lines
- 3.3.8.  Streams, lakes, ponds, drainage ways, dams
- 3.3.9.  Existing vegetation
- 3.3.10.  Tidal wetland boundaries and coastal resource limits (e.g. mean high water, shellfish beds, submerged aquatic vegetation, CAM boundary)
- 3.3.11.  Public water supply watershed, well heads or aquifer boundaries (when available)

### 3.4. *Drainage Patterns*

- 3.4.1.  Existing and planned drainage patterns (including off-site areas)
- 3.4.2.  Size of drainage areas
- 3.4.3.  Size and location of culverts and storm sewers (existing and planned)
- 3.4.4.  Size and location of existing and planned channels or waterways
- 3.4.5.  Major land uses of surrounding areas

### 3.5. *Road and Utility Systems*

- 3.5.1.  Planned and existing roads and buildings with their location and elevations
- 3.5.2.  Access roads: temporary and permanent
- 3.5.3.  Location of existing and planned septic systems
- 3.5.4.  Location and size of existing and planned sanitary sewers
- 3.5.5.  Location of other existing and planned utilities, telephone, electric, gas, drinking water wells, etc.

### 3.6. *Clearing, Grading, Vegetation Stabilization*

- 3.6.1.  Areas to be cleared, and sequence of clearing
- 3.6.2.  Disposal of cleared material (off-site and on-site)
- 3.6.3.  Areas to be excavated or graded, and sequence of grading or excavation
- 3.6.4.  Areas and acreage to be vegetatively stabilized (temporary and/or permanent)
- 3.6.5.  Planned vegetation with details of plants, seed, mulch, fertilizer, planting dates, etc.

## 4. **Erosion and Sediment Control Drawings**

- 4.1.  *Location of E&S measures on site plan drawing with appropriate symbol*
- 4.2.  *Construction drawings and specifications for measures*
- 4.3.  *Maintenance requirements of measures during construction of project*
- 4.4.  *Person responsible for maintenance during construction of project*
- 4.5.  *Maintenance requirements of permanent measures after project completion*
- 4.6.  *Organization or person responsible for maintenance of permanent measures having the authority maintain and upgrade control measures as designed or as needed to control erosion and sedimentation*
- 4.7.  *Handling of emergency situations (e.g. severe flooding, rains or other environmental problems)*
- 4.8.  *If not provided in the narrative, the information listed in check list paragraph 1.6 (see Narrative heading)*

## 5. **Additional Information**

- 5.1.  *Copy of measures given to Applicant and/or Preparer*
- 5.2.  *See attached comments page included*