



APPENDIX D

Record Drawing Checklist



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RECORD DRAWING CHECKLIST

Date: _____ Property owner: _____

Certifying engineer: _____ Certifying surveyor (as-constructed): _____

Project Name: _____

Address: _____

Proposed use of this property: _____

The Record Drawing submittal process is necessary in order for a construction bond or performance bond to be released, as described in the Northeast Tennessee Water Quality BMP Manual.

GENERAL INFORMATION:

- | | | | |
|------------------------------|-----------------------------|------------------------------|---|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 1. Does the title block have same project name, address, and contact persons as original plans? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 2. Are seal and signature for the certifying Engineer & Surveyor shown on the record drawings? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 3. Does each record drawing contain survey benchmarks or other reference points? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 4. Does each record drawing contain a north arrow, bar scale, and coordinates? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 5. Is construction complete and have disturbed areas been adequately stabilized to prevent soil erosion? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 6. Are the footprints for all impervious surfaces constructed as part of the approved Water Quality Management Plan? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 7. Does each record drawing contain the following statement along with the Registered Land Surveyors' stamp, signature, and license number:
<i>I hereby certify that I have surveyed the land boundaries and easements shown hereon in accordance with accuracy requirements for a Category I survey and that the ratio for precision of the unadjusted survey is not less than 1:10,000. I further certify that I have located all natural and manmade features shown hereon in accordance with the current Standards of Practice as adopted by the Tennessee State Board of Examiners for Land Surveyors. I certify the location, elevation and description of these features.</i> |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 8. Does each record drawing contain the following statement along with the registered Engineer's stamp, signature, and license number:
<i>Based on site observations and/or information provided by a registered Land Surveyor, I hereby certify that all grading, drainage, structures, and/or systems, erosion and sediment control practices including facilities, and vegetative measures have been completed in substantial conformance with the approved plans and specifications.</i> |

WATER QUALITY BMPs

- | | | | |
|------------------------------|-----------------------------|------------------------------|---|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 1. Do all plan views correctly show water quality BMPs at a readable scale, with 1-foot contours where 2-foot contours do not show sufficient detail? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 2. Are locations and invert elevations for all pipe/ditch outfalls into water quality BMPs shown? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 3. Are BMP and access easements shown and labeled? Are all conflicts avoided? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 4. Does the plan include accurate details of outlet structures, including all orifices and weirs, such as size, diameter, invert elevation, means of anchoring, underdrain systems, etc? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 5. Do water quality BMPs provide for the treatment of the water quality volume to a minimum standard of 80% TSS removal, in accordance with the Northeast Tennessee Water Quality BMP Manual? Are computations provided that are adequate to support 80% TSS removal? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 6. Do water quality BMPs provide for the capture and discharge of the channel protection volume over no less than a 24-hour period? Are computations provided that are adequate to support the channel protection standard? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 7. Do water quality BMPs provide for the attenuation of the local jurisdiction peak discharge storm events in accordance with the prevailing water quality regulations? Are computations provided adequate to prove attenuation? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 8. Has minimum freeboard of 1 foot been provided between 100-year storm and top of berm? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 9. Are manufacturer's identification number, model, and size for all proprietary BMPs shown on the plans? |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A | 10. Does the property's Operation and Maintenance Manual include and address each type of water quality BMP? |



RECORD DRAWING CHECKLIST (cont'd)

WATER QUALITY BMP INSPECTION and MAINTENANCE:

- Yes No N/A
- Yes No N/A
- Yes No N/A
1. A map that accurately identifies the water quality BMPs location and components (e.g., water quality basin, micropool extended detention basin, channels, swales, vegetated buffers, etc.) that are located on the property. This map also must show the locations of drainage and access easements. The language used to identify each BMP in the map must be consistent with the BMP names used in this Manual.
 2. "Inspection Checklist and Maintenance Guidance" sheet(s) for each type of BMP that is located on the property. At a minimum, the appropriate template checklist(s) provided in Chapter 4 of this Manual must be utilized. However, site designers may modify the templates to include inspections and maintenance elements as needed and appropriate for the BMPs.
 3. An executed copy of the Maintenance Covenants document

VEGETATED BUFFERS

- Yes No N/A
- Yes No N/A
- Yes No N/A
- Yes No N/A
1. Are vegetated buffers shown and labeled correctly on drawings (outer boundaries and zone boundaries, if applicable, should be shown)?
 2. Are vegetated buffer areas clearly marked on the plan with the statement "Vegetated Buffer. Do Not Disturb."?
 3. Have permanent markers been installed correctly on the site?
 4. Is the type of legal instrument (covenants, deed restriction, etc.) that will be used to serve and maintain the buffer stated on the drawing?

WATER QUALITY REDUCTION AREAS

The following questions pertain to water quality reductions areas only.

- Yes No N/A
- Yes No N/A
- Yes No N/A
- Yes No N/A
- Yes No N/A
- Yes No N/A
- Yes No N/A
- Yes No N/A
1. Which WQv reductions were received in the development of this site (check all that apply):
 1. Natural area preservation credit
 2. Managed area preservation credit
 3. Stream and vegetated buffers credit
 4. Vegetated channels credit
 5. Impervious area disconnection credit
 6. Environmentally sensitive large-lot neighborhood credit
 2. For reductions 1, 2, 3, and 6: Does the plan clearly show the outer boundaries of all open spaces, and indicate the intended vegetation and use of space?
 3. For reductions 2: Does the plan include a Vegetative Management Plan that indicates how the vegetation in the Managed Area will be managed in a stormwater-friendly manner?
 4. For reductions 4 and 6: Are the location of the vegetated channels clearly indicated on the drawing and constructed in conformance with design requirements stated in the Northeast Tennessee Water Quality BMP Manual? Provide slope, length, size, and vegetation type (e.g., fescue grass, Bermuda grass, etc.).
 5. For reductions 5 and 6: Are locations of disconnected downspouts clearly indicated on the drawings and labeled with the statement "This downspout shall remain disconnected from the impervious surfaces and shall forever be discharged onto pervious surfaces".
 6. For reductions 5 and 6: Do impervious area disconnections conform to the design requirements stated in the Northeast Tennessee Water Quality BMP Manual?
 7. For reductions 6, are the maximum lot density, the total impervious cover percentage, and open spaces shown and correctly labeled on the drawings?
 8. For reductions 6, is the type of legal instrument (covenants, deed restrictions, etc.) that will be used to limit imperviousness and open space development in the neighborhood indicated on the drawing?