# PHILADELPHIA WATER DEPARTMENT

**GSI UNIT**

#### Substantially Complete Design Submission (PWD 70%) Checklist

**This checklist outlines the requirements for each submission to PWD.**

All requirements will be checked by the PWD project manager prior to review. If a project is found to be incomplete, it will be returned to the provider and one week will be allotted for revision. Checklists can be modified based on project specific requirements.

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| **Substantially Complete Design Submission (PWD 70%)**  *Further develop designs for review by PWD with iterations as needed to provide an approved substantially complete design submission.* |  |
| * Materially complete plan set (.PDF and .DWG) including:   + Drawings prepared in accordance with the *GSI Survey & Drawing Standards*   + All design features included and identified   + Layout complete with all necessary call-outs   + Profile complete with all necessary call-outs   + Section, as needed, complete with all necessary call-outs   + All needed inverts and dimensions specified   + All needed details included   + Landscape plans using species from PWD approved GSI plant list   + System and SMP numbering included   + Roadway grading plans included (for bumpout locations only) |  |
| * Design calculations (.XLSX) including, at minimum   + Summary of key project metrics     - Contributing drainage area (impervious and pervious)     - Storage volume     - Loading ratio     - Calculations of release rates and orifice sizing for detention/slow-release systems     - Storm size managed     - Greened acres * Supporting calculations for all fields required in the GreenIT Data Entry Application Metrics Report * Dynamic Accounting files: * Dynamic Design Calculator Tool (.XLSX)) * Modeling files, if applicable (original model files and .PDF outputs) |  |
| * Drainage area maps (.PDF and .DWG) including:   + Distinct polygons to each inlet   + System labels provided   + Areas labeled in square feet and summed for each system   + Areas labeled as pervious or impervious based on existing condition |  |
| * Engineer’s estimate of construction cost (.XLSX) |  |

SUBMITTED BY \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ DATE \_\_\_­\_\_\_\_\_\_\_\_