Chapter 2 Submission, Review, and Approval Procedures

2.3 Review Phases

Section 2.3 describes the Review Phases associated with the Development Compliance, Development Exemption, Demolition, and Stormwater Retrofit Review Paths. The applicant should use this Section after the applicable Review Path has been determined for their project (Section 2.1.2 water.phila.gov /development/stormwater-plan-review/manual/chapter-2/2-1-existing-resources-and-site-analysis#2.1.2) and an understanding is achieved of which Review Phases and the Philadelphia Water Department (PWD) Stormwater Plan Review or Stormwater Billing and Incentives approvals are required for the project's Review Path (Section 2.2 water.phila.gov/development/stormwater-plan-review/manual/chapter-2/2-2-review -paths). The three possible Review Phases for a project include the Conceptual Review Phase, Post-Construction Stormwater Management Plan (PCSMP) Review Phase, and Record Drawing Review Phase.

Development Compliance Review Path (Section 2.3.1 p. 3)

- Conceptual Review Phase
- PCSMP Review Phase
- Record Drawing Review Phase

Development Exemption Review Path (Section 2.3.2 p. 20)

Conceptual Review Phase

Demolition Review Path (Section 2.3.3 **☞** p. 23)

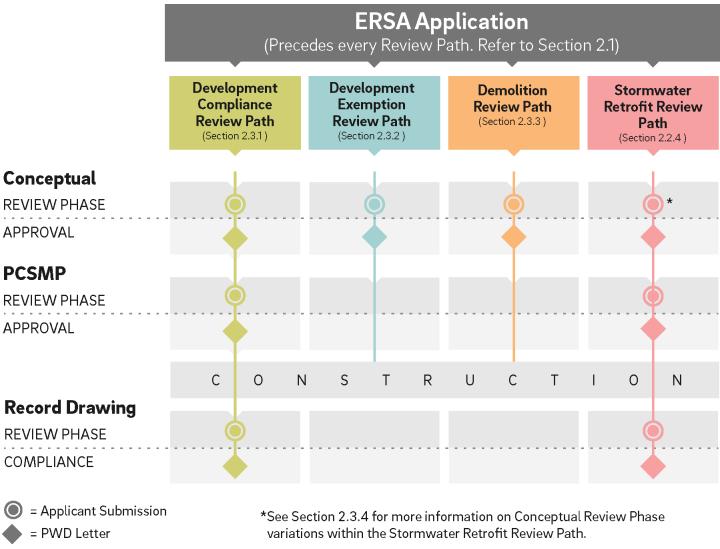
Conceptual Review Phase

Stormwater Retrofit Review Path (Section 2.3.4 p. 27)

- Conceptual Review Phase
- PCSMP Review Phase
- Record Drawing Review Phase

Figure 2.3-1 summarizes the relevant Review Phases for the different Review Paths. For each Review Phase, this Section describes Submission Package components, the submission and review process, and the project expiration policy.

Figure 2.3-1: Summary of Review Phases for Each Review Path



water.phila.gov/pool/images/swmg-figure-2-3-1-summary-path-review-phases.png

It is important for the applicant to note that while some Review Paths have similar Review Phases, specific Submission Package components, review processes, and approval documentation differ among Review Paths. These differences are described in detail within the following sections.

2.3.1 Development Compliance Review Path

Conceptual Review Phase

The Conceptual Review Phase is the first Review Phase of the Stormwater Plan Review process for the Development Compliance Review Path. A project is initiated with the submission of the Existing Resources and Site Analysis (ERSA) Application to PWD through the Project Dashboard on the **PWD Stormwater Plan Review** www.pwdplanreview.org website, which includes a Conceptual Review Phase Submission Package.

Submission Package Components

The Conceptual Review Phase Submission Package for the Development Compliance Review Path contains a Conceptual Stormwater Management Plan and Approval Fee. Projects on public land (local, State, and Federal) or projects sponsored by a government entity (unless PWD is the sole entity) must still pay review fees.

The process of developing a Conceptual Stormwater Management Plan will help the applicant develop a stormwater management strategy that minimizes impacts to existing critical features and responds to key site constraints and opportunities. PWD uses the Conceptual Stormwater Management Plan to gain a preliminary idea of what is proposed at the project site, to confirm the proposed project limits of disturbance (LOD), to assess the proposed stormwater management strategy, including evaluation of stormwater management practice (SMP) loading ratios and drainage areas (Chapter 3 water.phila.gov /development/stormwater-plan-review/manual/chapter-3), and to verify the project's applicability for an Expedited PCSMP Review (Section 2.4 water.phila.gov/development/stormwater-plan-review/manual/chapter-2 /2-4-expedited-pcsmp-reviews).

A complete Conceptual Review Phase Submission Package for the Development Compliance Review Path consists of the materials listed in Figure 2.3-2.

Figure 2.3-2: Development Compliance Review Path Conceptual Review Phase Submission Package Checklist

DEVELOPMENT COMPLIANCE REVIEW PATH Conceptual Review Phase Submission Package Checklist	
Conceptual Stormwater Management Plan	
Conceptual Stormwater Management Plan Approval Fee	

Conceptual Stormwater Management Plan

- The Conceptual Stormwater Management Plan must meet all requirements listed in Appendix E,
 Table E-3: Conceptual Stormwater Management Plan Requirements ■ water.phila.gov/development
 /stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-3-conceptual-stormwater
 -management-plan-requirements as well as general plan sheet requirements listed in Appendix E,
 Table E-1 ■ water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report
 -checklists/table-e-1-general-plan-sheet-requirements.
- In preparing the proposed stormwater management strategy for the project site, the applicant must use the stormwater management design process detailed in **Chapter 3** water.phila.gov/development /stormwater-plan-review/manual/chapter-3.
- Construction details should not be submitted with the Conceptual Stormwater Management Plan.
- A sample Conceptual Stormwater Management Plan is available at the PWD Development Services Resource Directory w water.phila.gov/development/resources/ for the applicant's reference.

Conceptual Stormwater Management Plan Approval Fee

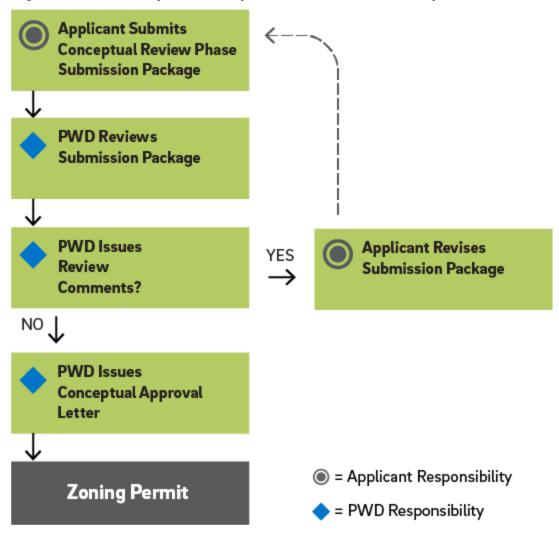
- For up-to-date fee information, the applicant is referred to the current Rates and Charges water.phila.gov/rates/ in the appendix of the PWD Regulations.
- PWD accepts payment in the form of a cashier's check, business check, or money order made payable to "City of Philadelphia." Personal checks will not be accepted, nor will installments.
- Because fees must be mailed or hand delivered, PWD will begin the Conceptual Review prior to receipt of the fee but cannot issue the Conceptual Approval Letter until the fee is received.
- The PWD project tracking number must be listed on the check and included in an accompanying transmittal letter.

Submission and Review Process

- The applicant submits the Conceptual Review Phase Submission Package as a component of a complete ERSA Application Submission Package (Section 2.1.1 www.phila.gov/development/stormwater-plan-review/manual/chapter-2/2-1-existing-resources-and-site-analysis#2.1.1) through the Project Dashboard on the PWD Stormwater Plan Review www.pwdplanreview.org website.
- The applicant will receive an automatic email confirmation that the submission has been received.

- PWD reviews the ERSA Application Submission Package, including the Conceptual Review Phase Submission Package, within five calendar days.
 - PWD reviews the submitted plans and documentation by analyzing the proposed development and its stormwater management strategy. At a conceptual level, preliminary determinations are made regarding compliance with the Stormwater Regulations, as well as eligibility for an Expedited PCSMP Review. Examples of specific review items evaluated by PWD include loading ratios for SMPs and management of 100% of post-development directly connected impervious area (DCIA). The applicant is referred to Chapter 3 water.phila.gov/development/stormwater-plan-review/manual/chapter-3 for stormwater management design guidance.
 - PWD performs an initial review of proposed water and sewer connections and possible conflicts with PWD infrastructure. However, this represents only a preliminary review, and more comprehensive reviews will take place with other PWD units (Section 2.5 w water.phila.gov/development/stormwater -plan-review/manual/chapter-2/2-5-pwds-development-review-process).
- If PWD has comments on the submission, comments will be issued to the applicant via email.
- The applicant resubmits to PWD, through the Project Dashboard on the PWD Stormwater Plan Review www.pwdplanreview.org website, a revised Conceptual Review Phase Submission Package that addresses the comments. A response letter addressing each review comment and outlining any major plan or design changes must be included with each resubmission. This can be an iterative process, and PWD does not restrict the number of times an applicant can resubmit. At any time, the applicant or PWD may request a meeting to discuss review comments.
- If PWD has no comments, or if the comments have been addressed sufficiently by the applicant, PWD issues an email confirming Conceptual Approval of the project, including an electronic copy of a Conceptual Approval Letter.
- The applicant may use the Conceptual Approval Letter in filing for a Zoning Permit. Building Permits, however, cannot be obtained, nor can earth disturbance activities begin, until the PCSMP Review Phase is complete.

Figure 2.3-3: Development Compliance Review Path Conceptual Review Phase Flow Chart



Expiration Policy

For the Conceptual Review Phase, the applicant has two years to resubmit in response to PWD comments. Longer extensions may be granted on a case-by-case basis. No extensions will be given for projects whose project tracking numbers begin with "20-".

Conceptual Approvals are valid for one year with an automatic one-year extension. This means an applicant has two years from the date of Conceptual Approval to apply for a Zoning Permit or submit the PCSMP Review Phase Submission Package to begin the PCSMP Review Phase. Past two years, a new Conceptual Approval must be obtained meeting current design standards and regulatory requirements. Applicants should contact their project's reviewer to determine if the Conceptual Stormwater Management Plan can be resubmitted under the existing project tracking number or if a new ERSA Application will be required. Projects whose project tracking numbers begin with "20-" must submit a new ERSA Application.

PCSMP Review Phase

The PCSMP Review Phase is the second Review Phase in the Stormwater Plan Review process for the Development Compliance Review Path. A project is eligible to submit for the PCSMP Review Phase after receiving a Conceptual Approval Letter from PWD.

The PCSMP Review Phase is PWD's final review before construction. At the end of this Review Phase, PWD will issue a PCSMP Approval Letter. PCSMP Approval is not a permit, but rather one of many prerequisites that must be obtained in order to receive sign-off on a Building Permit (Section 2.5 water.phila.gov /development/stormwater-plan-review/manual/chapter-2/2-5-pwds-development-review-process and Section 2.6 water.phila.gov/development/stormwater-plan-review/manual/chapter-2/2-6-pwds-role-in-philadelphias-development -process). For projects that do not require a Building Permit, PCSMP Approval must be obtained before earth disturbance activities can begin.

The site layout and stormwater management design included with the PCSMP Review Phase Submission Package must be consistent with the design that was approved during the Conceptual Review Phase. If major changes are made to the project after PWD issues a Conceptual Approval Letter, the applicant must contact PWD to determine if a revised Conceptual Approval Letter is needed before proceeding to the PCSMP Review Phase. Examples of major changes that would require a new Conceptual Approval include, but are not limited to:

- Changes in proposed LOD;
- Changes in proposed impervious area (such as building footprint or location);
- · Changes in stormwater routing; and
- Changes in the type, placement, sizing, and/or location of SMPs or changes to the stormwater management strategy.

If the stormwater management design changes during the PCSMP Review Phase, and the applicant would like to pursue an Expedited PCSMP Review, they must contact PWD before resubmitting to discuss specific design and submission requirements. The applicant is referred to **Section 2.4** water.phila.gov/development /stormwater-plan-review/manual/chapter-2/2-4-expedited-pcsmp-reviews for more information on Expedited PCSMP Reviews.

Submission Package Components

A complete PCSMP Review Phase Submission Package for the Development Compliance Review Path consists of the materials listed in Figure 2.3-4.

Figure 2.3-4: Development Compliance Review Path PCSMP Review Phase Submission Package Checklist

DEVELOPMENT COMPLIANCE REVIEW PATH Post-Construction Stormwater Management Plan Review Phase Submission Package Checklist		
Final Construction Drawings		
Post-Construction Stormwater Management Plan (PCSMP) Package		
Proof of Application for Applicable State and Federal Permits		
PCSMP Submittal Fee		
Transmittal Letter		

Final Construction Drawings

- All plans must be signed and sealed by a Professional Engineer licensed in the Commonwealth of Pennsylvania. Each plan sheet of the plan set must have an electronic signature and seal.
- All plans must meet general plan sheet requirements listed in Appendix E, Table E-1 water.phila.gov /development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-1-general-plan-sheet-requirements.
- The following items must be incorporated into the Final Construction Drawings:
 - Existing Conditions Plan that meets all requirements listed in Section 2.1.1 w water.phila.gov /development/stormwater-plan-review/manual/chapter-2/2-1-existing-resources-and-site-analysis#2.1.1,
 - Demolition Plan,
 - Site Plan,
 - Grading and utility information,
 - Landscaping information, and
 - Construction details.

Post-Construction Stormwater Management Plan Package

- Post-Construction Stormwater Management Plan
 - The PCSMP is a set of engineering drawings depicting the post-development conditions and postconstruction stormwater management design of a project. The PCSMP drawings and Final Construction Drawings do not necessarily have to be separate plans; they may be combined into a singular plan set.
 - The PCSMP must be signed and sealed by a Professional Engineer licensed in the Commonwealth of Pennsylvania. Each plan sheet of the plan set must have an electronic signature and seal.
 - Drawings must contain appropriate sequences of construction for each SMP (Chapter 4 water.phila.gov/development/stormwater-plan-review/manual/chapter-4).

• Grading and utility information, landscaping information, and SMP construction details, must be either incorporated into PCSMP drawings or provided as separate plan sheets.

E&S Plan

- The E&S Plan displays the post-construction condition along with other site characteristics related to the earth disturbance activities and proposed E&S measures for a project site.
- The E&S Plan must include a LOD line type which is drawn around all proposed site features, E&S controls, and other areas that may be disturbed over the course of construction for activities such as construction staging, re-grading, demolition, etc. The applicant is advised to be conservative when estimating the LOD to avoid proceeding along the wrong Review Path, which could lead to costly delays, change orders, and enforcement action during construction. PWD typically observes LODs in the field to be larger than what is proposed on the plans. A numerical value for the LOD must be clearly displayed on the E&S Plan.
- The E&S Plan must be prepared in accordance with the *Pennsylvania Department of Environmental Protection (PA DEP) Erosion and Sediment Pollution Control Program Manual Important Phttps://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest), Chapter 1 Required E&S Plan Content. E&S measures are referred to as E&S Best Management Practices (BMPs) in the PA DEP Manual.*
- The E&S Plan must also comply with the following requirements specific to PWD. Should E&S Plan requirements conflict between PA DEP and PWD, the applicant is to follow the specific PWD E&S Plan requirements presented in this Manual.
 - All requirements listed in Appendix E, Table E-4: Erosion and Sediment Control Plan
 Requirements water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and
 -report-checklists/table-e-4-erosion-and-sediment-control-plan-requirements must be met.
 - All Standard E&S Notes listed in Appendix E, Table E-5: Standard Erosion and Sediment Control Notes water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report -checklists/table-e-5-standard-erosion-and-sediment-control-notes must be included.
 - All Standard Sequence of Construction Notes listed in Appendix E, Table E-6: Standard Sequence
 of Construction Notes water.phila.gov/development/stormwater-plan-review/manual/appendices/e
 -plan-and-report-checklists/table-e-6-standard-sequence-of-construction-notes must be included.
 - Standard construction details must be included from the PA DEP Erosion and Sediment Pollution Control Program Manual https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt /Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest) for the following E&S measures: inlet protection, silt fence and/or compost filter sock, rock filter outlet, rock construction entrance, concrete washout station, dust control, and pumped water filter bag. If any of these E&S measures do not apply to the project site, justification must be provided as a note on the E&S Plan.
- A sample E&S Plan is available at the PWD Development Services Resource Directory water.phila.gov/development/resources/ for the applicant's reference.

- Post-Construction Stormwater Management Plan Report
 - The PCSMP Report contains a detailed discussion of the proposed development and its impacts to the volume, rate, and quality of stormwater runoff from the site. It also contains descriptions of the project site, stormwater management criteria, calculations, maps, and other supporting documentation. The applicant may refer to Chapter 3 water.phila.gov/development/stormwater-plan-review/manual/chapter-3 for information on stormwater management criteria and calculations.
 - The PCSMP Report must be electronically signed and sealed by a Professional Engineer licensed in the Commonwealth of Pennsylvania.
 - Specific requirements for the PCSMP Report are listed in Appendix E, Table E-7 w water.phila.gov /development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-7-post -construction-stormwater-management-plan-report-requirements.
- Operations and Maintenance Agreement Information
 - An O&M Agreement between the property owner and PWD is a component of PCSMP Approval and required of any project subject to the Stormwater Regulations. This Agreement requires the property owner at the time of development to construct SMPs on the listed parcel(s) in strict accordance with the Approved PCSMP and to maintain the SMPs such that they will adequately perform their designed functions. It also requires the property owner to maintain the site in accordance with the Approved PCSMP, prohibiting alterations including the conversion of pervious areas to impervious cover without authorization from PWD. It does not require the property owner to construct the SMPs if the development project associated with the SMPs does not commence or if no earth disturbance takes place. The Agreement is recorded against the property and runs with the land, if and when the property is sold or otherwise conveyed.
 - The "Operations and Maintenance Agreement Information" section of the Online Technical Worksheet must be filled out with current property(ies) and ownership information including the subject property's(ies') addresses(es), OPA Account Number(s), owner name(s), and name(s), business title(s), address(es), and email address(es) of the Agreement's proposed signatory(ies). The "Notes" text field, in addition to supplemental pages, may be used for the additional property and owner information required of projects involving multiple properties.
 - The following signatory business titles are acceptable. For all others, the business title must be listed, and a letter of authorization from the acceptable business title for the signatory confirming their ability to bind the owner organization in legal agreements must be submitted.
 - Corporations: President or Vice President
 - Limited Partnership (LP): General Partner
 - Limited Liability Corporation (LLC): Member or Manager
 - The most recent executed deed(s) demonstrating the current ownership of the property(ies) must be submitted.
 - The most recent legal description(s) of the property(ies) in an electronically editable (Word document) format must be submitted.
 - For further details regarding when and how this part of the process is completed, the applicant is referred to the Submission and Review Process section below.

- SMP Maintenance Guide
 - Prepared by the project's designer and submitted to PWD as part of the PCSMP Review Phase.
 - SMP Maintenance Guides are SMP- and site-specific and should be provided to and implemented by the property owner as a guide for long-term operations and maintenance of the SMPs on-site.
 - The SMP Maintenance Guide must include a Site Map and a separate Maintenance Schedule Form for each SMP to allow the property owner to track all maintenance activities for their site.
 - The SMP Maintenance Guide must be updated and resubmitted with all field changes.
 - The applicant is referred to Appendix G → water.phila.gov/development/stormwater-plan-review/manual /appendices/g-smp-maintenance-guide-documents/ for an SMP Maintenance Guide sample and associated template documents.

Proof of Application for Applicable State and Federal Permits

Proof of issuance is required for PWD sign-off on a Building Permit; however, the applicant must only prove that they have applied for all applicable permits within the initial submission for PCSMP Review to proceed. To provide proof of application, the applicant must submit copies of permit applications, application receipts, or notification letters from relevant agencies.

- Applicable permits include various State and Federal permits that may be required for development on a given site.
- If the project will involve earth disturbance of more than one acre, the applicant may need to obtain a PA DEP General (PAG-02) National Pollutant Discharge Elimination System (NPDES) Permit or Individual NPDES Permit for Stormwater Discharges Associated with Construction Activities.
- For Pennsylvania Land Recycling Program (Act 2) sites, proof of notice to PA DEP for both an intent to remediate and notification of work to an existing Act 2 site is required.
 - The applicant can submit notification correspondence through PA DEP's OnBase form upload system ► https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx.
 - The PA DEP Environmental Cleanup and Brownfields program's resource account email address is RA-EP-SEROECB@pa.gov.
- It is the applicant's responsibility to determine which permits are required by other regulatory agencies for a project. The applicant is referred to Section 2.6 water.phila.gov/development/stormwater-plan-review/manual/chapter-2/2-6-pwds-role-in-philadelphias-development-process for information on Zoning Code requirements and to Section 2.7 water.phila.gov/development/stormwater-plan-review/manual/chapter-2/2-7-pwd-and-pennsylvania-department-of-environmental-protection for information on NPDES Permit requirements.

Post-Construction Stormwater Management Plan Submittal Fee

- For up-to-date fee information, the applicant is referred to the current Rates and Charges water.phila.gov/rates/ of the appendix of the PWD Regulations.
- Payment must come in the form of a cashier's check, business check, or money order, made payable to "City of Philadelphia." Personal checks will not be accepted, nor will installments.
- The PWD project tracking number must be listed on the check and included in an accompanying transmittal letter.

Submission and Review Process

- The applicant submits a complete PCSMP Review Phase Submission Package to PWD through the Project Dashboard on the PWD Stormwater Plan Review www.pwdplanreview.org website.
- PWD conducts an initial PCSMP administrative screening of the submitted materials to confirm that all necessary components are included. If any of the PCSMP Review Phase Submission Package components are found to be missing or incomplete, PWD will contact the applicant by email.
- Once PWD's PCSMP administrative screening is complete, and PWD has verified the inclusion of all components, PWD contacts the applicant via email and begins the 15-day review period (five-day period for Expedited PCSMP Reviews, Section 2.4 ▼ water.phila.gov/development/stormwater-plan-review/manual /chapter-2/2-4-expedited-pcsmp-reviews). During the review, PWD examines the submittal to determine if all applicable Stormwater Regulations are met for the project. PWD verifies that all plans, documents, and calculations are legible, accurate, and consistent.
- If PWD has comments on the submission, PWD issues the comments to the applicant via email. PWD issues all comments in a PCSMP Review letter, which is sent as an attachment to the email. In this email, the reviewer provides their contact information, and the applicant is encouraged to contact the reviewer directly if they have any questions about a particular comment.
- The applicant resubmits to PWD a revised PCSMP Review
 Phase Submission Package that addresses the comments
 through the Project Dashboard on the PWD Stormwater Plan
 Review www.pwdplanreview.org website.
 - Each resubmission initiates the 15-day review period (fiveday period for Expedited PCSMP Reviews).
 - Revised submittals must include all required revisions and new material, as well as a response letter addressing each review comment and indicating where the new information can be found.
 - A response letter is required that describes any changes to the design that may not be included within the comment response letter.
 - This can be an iterative process, and PWD does not restrict the number of times an applicant can resubmit. At any time, the applicant or PWD may request a meeting to discuss review comments.

Quick Tip

The applicant can reduce the length of a PCSMP Review by being responsive to PWD-issued review comments, addressing comments and resubmitting quickly, performing quality assurance/quality control on all submission materials, and using this Manual to ensure the applicable Stormwater Regulations are being met and compliance is clearly documented.

• Once all of the review comments have been addressed by the applicant, PWD will issue an O&M Agreement(s) for signature and notarization, as well as invoices for additional fee payment consisting of a PCSMP Hourly Review Fee and O&M Agreement Recording Fee(s), and fee in lieu payment, if applicable (Section 3.1.2 water.phila.gov/development/stormwater-plan-review/manual/chapter-3/3-1-site-assessment #3.1.2).

- The standard O&M Agreement consists of:
 - Agreement with signature pages;
 - Signatory acknowledgement sections;
 - Exhibit A, legal description(s) of the property(ies);
 - Exhibit B, a list of SMPs to be installed on the listed parcel(s); and
 - Exhibit C, legal description of the SMP area
- PWD compiles the signatory sections, the signatory acknowledgement sections, and Exhibit A, based on the information provided by the applicant within the Online Technical Worksheet, which must be completed and submitted as part of the PCSMP Review Phase Submission Package. Incomplete and/or incorrect information within the Online Technical Worksheet will prevent the issuance of a PCSMP Approval Letter until all omissions and/or discrepancies are addressed. Signatory(ies) of the property owner(s) must be authorized to bind the property owner(s) to legal agreements. The signatory acknowledgement sections must be notarized and serve to verify the identities of all parties signing the agreement. Exhibit A contains metes-and-bounds descriptions for each parcel in its entirety, on which earth disturbance is proposed. Exhibit B lists all SMPs to be constructed on the listed parcel(s). Exhibit C can be either the property description listed in Exhibit A or a specific surveyed area of the property directly included in SMP design. Should amendments to the O&M Agreement become necessary after execution, the O&M Amendments will be sequentially numbered and will replace and supersede any and all of the project's previous O&M Agreements and Amendments.

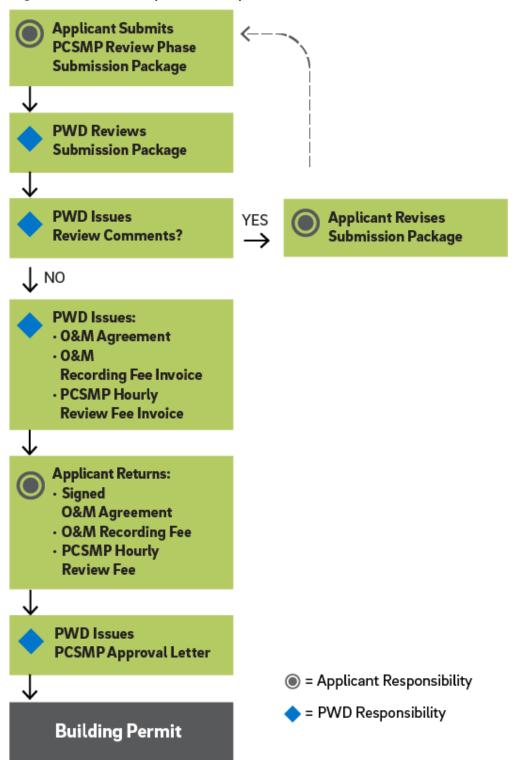
Quick Tip

As described in the introduction of Chapter 2, Stormwater Plan Review is part of a larger development review process, and there may be circumstances where Stormwater Plan Review cannot issue PCSMP Approval until comments from another PWD unit, local, State, or Federal agency have been addressed. It is the applicant's responsibility to determine whether the project must comply with other PWD, local, State, or Federal requirements. The applicant is referred to Section 2.5 water.phila.gov/development /stormwater-plan-review/manual /chapter-2/2-5-pwds-development -review-process, Section 2.6 **■** water.phila.gov/development /stormwater-plan-review/manual /chapter-2/2-6-pwds-role-in -philadelphias-development-process, and Section 2.7 water.phila.gov /development/stormwater-plan-review /manual/chapter-2/2-7-pwd-and -pennsylvania-department-of -environmental-protection for more information.

- For up-to-date information on the PCSMP Hourly Review
 Fee and fee in lieu, the applicant is referred to the current Rates and Charges w water.phila.gov/rates/in the appendix of the PWD Regulations.
- The O&M Agreement Fee is determined by the **fee schedule** www.phila.gov/records/pdfs/FeeSchedule /Fee%20Schedule%207-1-18.pdf established with the City of Philadelphia Department of Records.
- The applicant submits fee payments in the form of a cashier's check, business check, or money order, made payable to "City of Philadelphia." Personal checks will not be accepted, nor will installments.
 The PWD project tracking number must be listed on all checks or included in an accompanying transmittal letter.
- Upon receipt of fee check(s) and two original, signed, and notarized copies of each O&M Agreement, PWD issues a PCSMP Approval Letter via email.

- After issuance of the PCSMP Approval Letter, a representative of PWD will sign the O&M Agreement(s), and the O&M Agreement(s) are then recorded with the City of Philadelphia Department of Records on behalf of the property owner. A copy of the signed, fully executed O&M Agreement(s) will be mailed to the signatory at the conclusion of the recording process.
- The PCSMP Approval Letter can be used to obtain sign-off on the Building Permit.

Figure 2.3-5: Development Compliance Review Path PCSMP Review Phase Flow Chart



Field Changes

PWD recognizes that design changes may be necessary after PWD issues the PCSMP Approval Letter. If construction must deviate from approved plans, the applicant must contact PWD immediately. Deviations include, but are not limited to:

- Location, size, and/or type of SMPs;
- Infiltration feasibility; and/or
- Other changes in the stormwater conveyance system.

Depending on the extent of the deviation, PWD may request that the applicant submit formally for field change approval. Field changes are given priority in the PCSMP Review queue and will be reviewed as soon as possible. The applicant must speak directly to the assigned reviewer to determine what must be included in the field change submittal. An additional hourly review fee may be applied to the review of all field changes.

Field changes should be submitted through the Project Dashboard at the **PWD Stormwater Plan Review** www.pwdplanreview.org website. All field changes should include a short narrative describing the deviations from the originally approved PCSMP.

At the completion of construction, PWD's Inspections Coordinator must be contacted to schedule a final inspection (Chapter 5 water.phila.gov/development/stormwater-plan-review/manual/chapter-5). This will initiate the Record Drawings Review Phase.

Expiration Policy

For the PCSMP Review Phase, the applicant has two years to resubmit in response to PWD comments. Longer extensions may be granted on a case-by-case basis. No extensions will be given for projects whose project tracking numbers begin with "20-".

A PCSMP Approval is valid for two years from the date it is issued unless a valid Building or Site Permit is in place. Projects that did not require Building or Site Permits from L&I will remain active if the projects have advanced to active construction. Past two years, a new PCSMP Approval must obtained meeting current design standards and regulatory requirements. Applicants should contact their project's reviewer to determine if the PCSMP can be resubmitted under the existing project tracking number or if an ERSA Application will be required. Projects whose project tracking numbers being with "20-" must submit a new ERSA Application.

Record Drawing Review Phase

The Record Drawing Review Phase is the final Review Phase of the Stormwater Plan Review process for the Development Compliance Review Path. A project is eligible to submit for the Record Drawing Review Phase once construction activities are substantially complete.

PWD uses a project's Record Drawings to verify compliance of the constructed site with the Stormwater Regulations and to document and verify the quantity of stormwater managed on a site. As part of the Record Drawing Review Phase, an updated SMP Maintenance Guide may be required if the location of SMPs and associated structures differs from the Approved PCSMP. If compliance issues were observed during construction, PWD may request that L&I hold the Certificate of Occupancy until the Record Drawing Review Phase or final inspection is complete. It is critical that the Record Drawings reflect any changes from the Approved PCSMP design, approved field changes or otherwise, that may affect the performance of the SMPs. The Record Drawing Review Phase is complete when the applicant receives a letter confirming that the Record Drawing(s) are in general accordance with the Approved PCSMP.

Throughout construction, the contractor or engineer must document all SMP installations as described in the Construction Certification Package (CCP). The contractor must also keep the Approved PCSMP on-site at all times throughout the construction process and document all changes from the Approved PSCMP as they occur. PWD recommends marking up and tracking changes on an actual copy of the Approved PCSMP to simplify preparation of the Record Drawings. Using the Approved PCSMP as a base, the Record Drawings should highlight information confirmed to be in accordance with the Approved PCSMP in yellow and identify any deviations in red ink. The Record Drawings must be clear and legible.

Submission Package Components

The Record Drawing Review Phase Submission Package consists of materials listed in Figure 2.3-6, which must be submitted to PWD for review after the final inspection has been completed. All submissions must be made through the Project Dashboard on the PWD Stormwater Plan Review www.pwdplanreview.org website. All submissions should include the applicant's contact information if the submission is being made by a different engineering firm than that of the original ERSA Application.

Figure 2.3-6: Development Compliance Review Path Record Drawing Review Phase Submission Package Checklist

DEVELOPMENT COMPLIANCE REVIEW PATH Record Drawing Review Phase Submission Package Checklist	
Record Drawings	
Construction Certification Package	
Transmittal Letter	

Record Drawings

- The Record Drawings may be prepared by Professional Engineers, Registered Architects, Landscape Architects, Professional Land Surveyors, Professional Geologists, and Contractors licensed in the Commonwealth of Pennsylvania. The preparer of the plan must display prominently their signature and professional seal, or, in the case of Licensed Contractors, their signature and L&I Contractor License Number, on each Record Drawing plan sheet. (PA DEP may have different requirements concerning the types of professionals who may prepare Record Drawings. For projects that require a NPDES Permit, the applicant is strongly encouraged to refer to PA DEP's requirements for Record Drawings before selecting a professional to prepare Record Drawing(s) for PWD.)
- If the Record Drawings are determined to be in general accordance with the Approved PCSMP, PWD will issue a letter via email stating as such. Once the closeout process is complete, in accordance with **Appendix M** water.phila.gov/development/stormwater-plan-review/manual/appendices/m-pcsmp-project -closeout/, PWD will resolve the "Hold Permit Completion" on the "PWD Stormwater Mgmt. Review" for the associated L&I building permit(s) in **eCLIPSE** www.phila.gov/departments/department-of-licenses-and -inspections/eclipse-faqs/.
- The Record Drawing(s) must meet all requirements listed in Appendix E, Table E-8 water.phila.gov /development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-8-record-drawing -requirements.
- The applicant is referred to Appendix K w water.phila.gov/development/stormwater-plan-review/manual /appendices/k-record-drawing-sample for a sample Record Drawing.
- The applicant is referred to Section 5.3.2 water.phila.gov/development/stormwater-plan-review/manual /chapter-5/5-3-construction-documentation#5.3.2 for more information on Record Drawing construction documentation.

Construction Certification Package

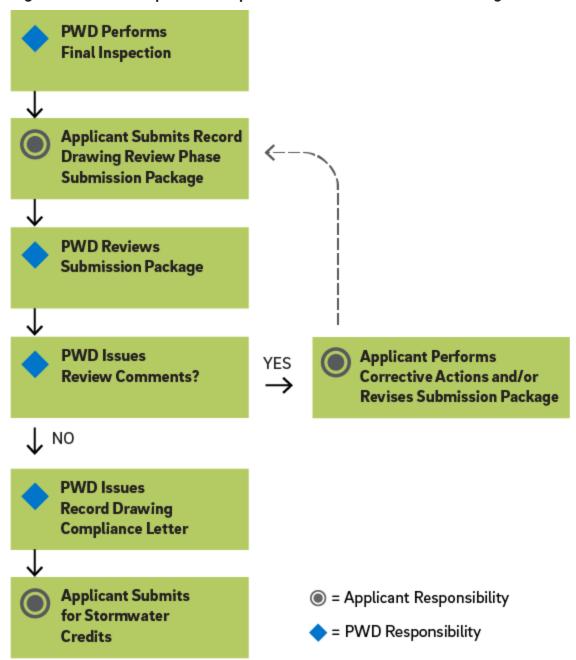
- The applicant is referred to Appendix J water.phila.gov/development/stormwater-plan-review/manual /appendices/j-construction-certification-package for the CCP Template and instructions.
- The applicant can submit the CCP with the Record Drawing or as a separate submission using the "assorted files" option in the Project Dashboard on the PWD Stormwater Plan Review www.pwdplanreview.org website.
- The applicant is referred to Section 5.3.1 water.phila.gov/development/stormwater-plan-review/manual /chapter-5/5-3-construction-documentation#5.3.1 for more information on CCP documentation during construction.

Submission and Review Process

- The applicant submits a complete Record Drawing Review Phase Submission Package to PWD through the Project Dashboard on the www.pwdplanreview.org/PWD Stormwater Plan Review www.pwdplanreview.org website. The submission must also include a narrative identifying the PWD project tracking number and the applicant's contact information if the submission is being made by a different engineering firm than that of the original ERSA Application.
- PWD reviews the submitted Record Drawing(s) and CCP to ensure that the project has been constructed in accordance with the project's Approved PCSMP.
- Upon review, PWD will issue comments on the submission via email.
 - If the submitted Record Drawing Review Phase Submission Package is determined to be incomplete, the applicant must modify and/or add to the Record Drawings and/or CCP per the comments contained in the letter, and resubmit through the Project Dashboard on the PWD Stormwater Plan Review www.pwdplanreview.org website. The applicant must include a response letter addressing each review comment.
 - If the submitted Record Drawings are determined to be complete, but constructed conditions differ from the Approved PCSMP, PWD may require the applicant to submit calculations prepared by a qualified design professional demonstrating compliance with Stormwater Regulations. Specifically, PWD may check the SMP storage volume, release rate, drainage areas, and other items that affect a site's compliance with the Stormwater Regulations (Chapter 3 w water.phila.gov/development /stormwater-plan-review/manual/chapter-3). If the applicant cannot demonstrate compliance with the Stormwater Regulations, PWD will request that the applicant outline corrective actions to bring the project into compliance. Once corrective actions have been performed, the applicant must contact PWD to re-inspect. If necessary, the applicant must submit requested materials that address PWD's comments through the Project Dashboard on the PWD Stormwater Plan Review www.pwdplanreview.org website.
 - If the Record Drawings are determined to be in general accordance with the Approved PCSMP, PWD will issue a letter via email stating as such. Once the closeout process is complete, in accordance with Appendix M water.phila.gov/development/stormwater-plan-review/manual/appendices/m-pcsmp-project -closeout/, PWD will resolve the "Hold Permit Completion" on the "PWD Stormwater Mgmt. Review" for the associated L&I building permit(s) in eCLIPSE www.phila.gov/departments/department-of -licenses-and-inspections/eclipse-fags/.

Most non-residential and condominium projects that comply with Stormwater Regulations per a Record Drawing review and final inspection may be eligible for stormwater credits. A **Stormwater Credits Application (Form B)** www.pwdplanreview.org/upload/pdf/Form_B_20190409.pdf may be submitted to Stormwater Billing and Incentives for review. For additional information on stormwater credits, the applicant is referred to **Section 6.3** water.phila.gov/development/stormwater-plan-review/manual/chapter-6/6-3-stormwater-credits/.

Figure 2.3-7: Development Compliance Review Path Record Drawing Review Phase Flow Chart



2.3.2 Development Exemption Review Path

Conceptual Review Phase

The Conceptual Review Phase is the first Review Phase of the Stormwater Plan Review process for the Development Exemption Review Path. A project is initiated with the submission of the ERSA Application to PWD through the Project Dashboard on the PWD Stormwater Plan Review www.pwdplanreview.org website, which includes a Conceptual Review Phase Submission Package.

Submission Package Components

The Conceptual Review Phase Submission Package for the Development Exemption Review Path contains an E&S Plan which PWD will use to verify the proposed project LOD and to confirm the E&S Plan has been prepared in accordance with the E&S requirements of the PA DEP as specified in 25 Pa. Code §102.4.

A complete Conceptual Review Phase Submission Package for the Development Exemption Review Path consists of the materials listed in Figure 2.3-8.

Figure 2.3-8: Development Exemption Review Path Conceptual Review Phase Submission Package Checklist

DEVELOPMENT EXEMPTION REVIEW PATH Conceptual Review Phase Submission Package Checklist

Erosion and Sediment Control (E&S) Plan

Erosion and Sediment Control Plan

- The E&S Plan displays the post-construction condition along with other site characteristics related to the earth disturbance activities and proposed E&S measures for a project site.
- The E&S Plan must include a LOD line type which is drawn around all proposed site features, E&S controls, and other areas that may be disturbed over the course of construction for activities such as construction staging, re-grading, demolition, etc. The applicant is advised to be conservative when estimating the LOD to avoid proceeding along the wrong Review Path, which could lead to costly delays, change orders, and enforcement action during construction. PWD typically observes LODs in the field to be larger than what is proposed on the plans. A numerical value for the LOD must be clearly displayed on the E&S Plan.
- The E&S Plan must be prepared in accordance with the PA DEP Erosion and Sediment Pollution Control
 Program Manual https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater
 %20Construction/Pages/E-S%20Resources.aspx (2012 or latest), Chapter 1 Required E&S Plan Content. E&S
 measures are referred to as E&S BMPs in the PA DEP Manual.

- The E&S Plan must also comply with the following requirements specific to PWD. Should E&S Plan requirements conflict between PA DEP and PWD, the applicant is to follow the specific PWD E&S Plan requirements presented in this Manual.
 - All requirements listed in Appendix E, Table E-4: Erosion and Sediment Control Plan Requirements water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and -report-checklists/table-e-4-erosion-and-sediment-control-plan-requirements must be met.
 - All Standard E&S Notes listed in Appendix E, Table E-5: Standard Erosion and Sediment Control Notes water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report -checklists/table-e-5-standard-erosion-and-sediment-control-notes must be included.
 - All Standard Sequence of Construction Notes listed in Appendix E, Table E-6: Standard Sequence of Construction Notes w water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-6-standard-sequence-of-construction-notes must be included.
 - Standard construction details must be included from the *PA DEP Erosion and Sediment Pollution Control Program Manual* https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt /Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest) for the following E&S measures: inlet protection, silt fence and/or compost filter sock, rock filter outlet, rock construction entrance, concrete washout station, dust control, and pumped water filter bag. If any of these E&S measures do not apply to the project site, justification must be provided as a note on the E&S Plan.
 - Electronic signature (for projects that propose more than 15,000 square feet of earth disturbance; 5,000 square feet in the Darby and Cobbs Creeks Watershed).
- A sample E&S Plan is available at the PWD Development Services Resource Directory water.phila.gov /development/resources/ for the applicant's reference.

Submission and Review Process

- The applicant submits the Conceptual Review Submission Phase Package as a component of a complete ERSA Application Submission Package (Section 2.1.1 w water.phila.gov/development/stormwater-plan-review /manual/chapter-2/2-1-existing-resources-and-site-analysis#2.1.1) through the Project Dashboard on the PWD Stormwater Plan Review www.pwdplanreview.org website.
- The applicant will receive an automatic email confirmation that the submission has been received.
- PWD reviews the ERSA Application Submission Package, including the Conceptual Review Phase Submission Package, within five calendar days.
 - PWD reviews the submitted plans and documentation by analyzing the proposed development and LOD to confirm exemption from the Stormwater Regulations and by confirming the development of an E&S Plan. PWD performs an initial review of proposed water and sewer connections and possible conflicts with PWD infrastructure. However, this represents only a preliminary review, and the applicant will still need to obtain separate connection permits outside of this Conceptual Review Phase (Section 2.5 w water.phila.gov/development/stormwater-plan-review/manual/chapter-2/2-5-pwds -development-review-process).
- If PWD has comments on the submission, PWD issues the comments to the applicant via email.

- The applicant resubmits to PWD, through the Project Dashboard on the PWD Stormwater Plan Review www.pwdplanreview.org website, a revised Conceptual Review Phase Submission Package that addresses the comments. A response letter addressing each review comment and outlining any major plan or design changes must be submitted with each resubmission. This can be an iterative process, and PWD does not restrict the number of times an applicant can resubmit. At any time, the applicant or PWD may request a meeting to discuss review comments.
- If PWD has no comments, or if the comments have been addressed sufficiently by the applicant, PWD issues an email confirming Conceptual Approval of the project, including an electronic copy of the Conceptual Approval Letter.
 - For projects whose earth disturbance will exceed one acre, PWD may defer the E&S review to PA DEP. If PWD does defer a review to PA DEP, this will be stated in the Conceptual Approval Letter. In this circumstance, earth disturbance activities cannot begin until PA DEP approves the E&S Plan and/or issues the NPDES Permit (if required). The applicant must also send an electronic copy of plans approved by PA DEP to PWD.
- The applicant may use the Conceptual Approval Letter when filing a Zoning Application or Building Permit.

Expiration Policy

For the Conceptual Review Phase, the applicant has two years to resubmit in response to PWD comments. Longer extensions may be granted on a case-by-case basis.

For Development Exemption projects, a Conceptual Approval Letter is valid for two years from the date of issuance unless a valid Building or Site Permit is in place. Projects that did not require Building or Site Permits from L&I will remain active if the projects have advanced to active construction. Past two years, a new Conceptual Approval must be obtained meeting current design standards and regulatory requirements. Applicants should contact their project's reviewer to determine if the Conceptual Stormwater Management Plan can be resubmitted under the existing project tracking number or if a new ERSA Application will be required.

2.3.3 Demolition Review Path

Conceptual Review Phase

The Conceptual Review Phase is the first Review Phase of the Stormwater Plan Review process for the Demolition Review Path. A project is initiated with the submission of the ERSA Application to PWD through the Project Dashboard on the **PWD Stormwater Plan Review** www.pwdplanreview.org website, which includes a Conceptual Review Phase Submission Package.

Submission Package Components

The Conceptual Review Phase Submission Package for the Demolition Review Path contains a Demolition Plan and an E&S Plan. PWD uses these components to confirm the proposed project LOD, that the project is limited to just demolition, and to confirm that the E&S Plan has been prepared with the E&S requirements of the PA DEP as specified in 25 Pa. Code §102.4.

A complete Conceptual Review Phase Submission Package for the Demolition Review Path consists of the materials listed in Figure 2.3-9.

Figure 2.3-9: Demolition Review Path Conceptual Review Phase Submission Package Checklist

DEMOLITION REVIEW PATH Conceptual Review Phase Submission Package Checklist	
	Erosion and Sediment Control (E&S) Plan
	Demolition Plan

Erosion and Sediment Control Plan

- The E&S Plan is representative of the stabilized post demolition site condition and displays site characteristics related to the earth disturbance activities and proposed E&S measures. The E&S Plan must show that the site will be left in a stabilized condition that does not create a public health and safety concern. Further, site preparation for future development activities including foundation work associated with an L&I Foundation-Only Building Permit, is not permitted as part of the Demolition Review Path. In order for the project to complete the Demolition Review Path, all disturbed areas must be stabilized with pervious cover (e.g., grass, gravel, etc.).
- The E&S plan must include a LOD line type which is drawn around all proposed site features, structures to be removed, E&S controls, and other areas that may be disturbed over the course of demolition. The applicant is advised to be conservative when estimating the LOD so as to avoid continuing down the wrong Review Path, which could lead to costly delays, change orders, and enforcement action during construction. PWD typically observes LODs in the field to be larger than what is proposed on the plans. A numerical value for the LOD must be clearly displayed on the E&S Plan.
- The E&S Plan must be prepared in accordance with the *PA DEP Erosion and Sediment Pollution Control Program Manual* * https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater %20Construction/Pages/E-S%20Resources.aspx (2012 or latest), Chapter 1 Required E&S Plan Content. E&S measures are referred to as E&S BMPs in the PA DEP Manual.

- The E&S Plan must also comply with the following requirements specific to PWD. Should E&S Plan requirements conflict between PA DEP and PWD, the applicant is to follow the specific PWD E&S Plan requirements presented in this Manual.
 - All requirements listed in Appendix E, Table E-4: Erosion and Sediment Control Plan Requirements water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and -report-checklists/table-e-4-erosion-and-sediment-control-plan-requirements must be met.
 - All Standard E&S Notes listed in Appendix E, Table E-5: Standard Erosion and Sediment Control Notes w water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report -checklists/table-e-5-standard-erosion-and-sediment-control-notes must be included.
 - All Standard Sequence of Construction Notes listed in Appendix E, Table E-6: Standard Sequence of Construction Notes w water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-6-standard-sequence-of-construction-notes must be included.
 - Standard construction details must be included from the *PA DEP Erosion and Sediment Pollution Control Program Manual* → https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt /Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest) for the following E&S measures: inlet protection, silt fence and/or compost filter sock, rock filter outlet, rock construction entrance, concrete washout station, dust control, and pumped water filter bag. If any of these E&S measures do not apply to the project site, justification must be provided in the notes on the E&S Plan.
- A sample E&S Plan is available at the PWD Development Services Resource Directory water.phila.gov /development/resources/ for the applicant's reference.

Demolition Plan

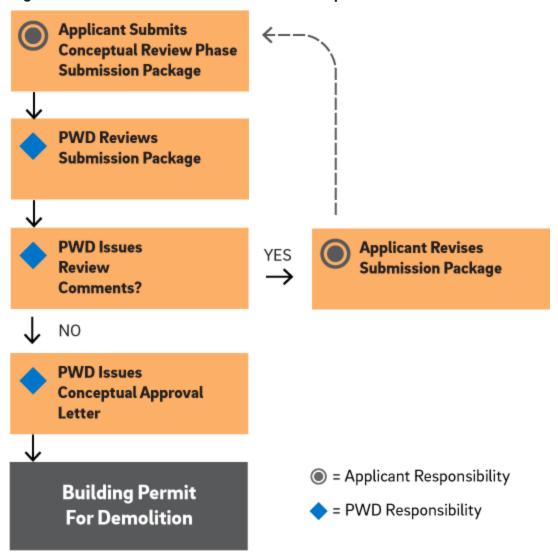
- The Demolition Plan is representative of existing conditions and identifies all site features to be removed during demolition
- The Demolition Plan identifies all utilities and lateral connections that will be abandoned including cut and plug locations.
- All requirements listed in Appendix E, Table E-2: Existing Conditions Plan Requirements water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-2 -existing-conditions-plan-requirements must be met.

Submission and Review Process

- The applicant submits the Conceptual Review Phase Submission Package as a component of a complete ERSA Application Submission Package (Section 2.1.1 www.phila.gov/development/stormwater-plan-review /manual/chapter-2/2-1-existing-resources-and-site-analysis#2.1.1) through the Project Dashboard on the PWD Stormwater Plan Review www.pwdplanreview.org website.
- The applicant will receive an automatic email confirmation that the submission has been received.
- PWD reviews the ERSA Application Submission Package, including the Conceptual Review Phase Submission Package, within five calendar days.
 - PWD reviews the submitted plans and documentation by analyzing the proposed development and LOD to confirm exemption from the Stormwater Regulations and by confirming the development of an E&S Plan prepared by a Professional Engineer licensed in the Commonwealth of Pennsylvania.
- If PWD has comments on the submission, PWD issues the comments to the applicant via email.

- The applicant resubmits to PWD, a revised Conceptual Review Phase Submission Package that addresses the comments through the Project Dashboard on the www.pwdplanreview.org/PWD Stormwater Plan Review www.pwdplanreview.org website. This can be an iterative process, and PWD does not restrict the number of times an applicant can resubmit. At any time, the applicant or PWD may request a meeting to discuss review comments.
- If PWD has no comments, or if the comments have been addressed sufficiently by the applicant, PWD issues an email confirming Conceptual Approval of the project, including an electronic copy of the Conceptual Approval Letter.
 - For projects whose earth disturbance will exceed one acre, PWD may defer the E&S review to PA DEP. If PWD does defer a review to PA DEP, this will be stated in the Conceptual Approval Letter. In this circumstance, demolition or earth disturbance activities cannot begin until PA DEP approves the E&S Plan and/or issues the NPDES Permit (if required). The applicant must also send an electronic copy of plans approved by PA DEP to PWD.
- The applicant may use the Conceptual Approval Letter in the process of obtaining Building Permit sign-off for Demolition from PWD. The applicant is referred to Section 2.5 ■ water.phila.gov/development /stormwater-plan-review/manual/chapter-2/2-5-pwds-development-review-process for more information on other reviews for Building Permit sign-off.
 - If the project requires a Building Permit, the applicant must contact PWD to determine if a different Review Path is more appropriate for the project.
 - If the Demolition project involves the removal of impervious surfaces, the applicant may be eligible for stormwater credits. A **Stormwater Credits Application (Form B)** www.pwdplanreview.org/upload /pdf/Form_B_20190409.pdf may be submitted to Stormwater Billing and Incentives for review. For additional information on stormwater credits, the applicant is referred to **Section 6.3** water.phila.gov/development/stormwater-plan-review/manual/chapter-6/6-3-stormwater-credits/.

Figure 2.3-10: Demolition Review Path Conceptual Review Phase Flow Chart



Expiration Policy

For the Conceptual Review Phase, the applicant has two years to resubmit in response to PWD comments. Longer extensions may be granted on a case-by-case basis.

For Demolition Review Path projects, a Conceptual Approval Letter is valid for two years from the date of issuance unless a valid Demolition Permit is in place. Projects that did not require Demolition Permits from L&I will remain active if the projects have advanced to active demolition. Past two years, a new Conceptual Approval must be obtained meeting current design standards and regulatory requirements. Applicants should contact their project's reviewer to determine if the Conceptual Stormwater Management Plan can be resubmitted under the existing project tracking number or if a new ERSA Application will be required.

2.3.4 Stormwater Retrofit Review Path

Conceptual Review Phase

Stormwater Retrofits can follow one of two Conceptual Review Phase categories. The category selection depends on if the project is seeking a Stormwater Grant for design and construction funding. If the project is applying for grant funding, they will fall into the Application Review category.

Application Review (Stormwater Grant Recipients Only)

Most projects under the Stormwater Retrofit Review Path will be Stormwater Grant recipients. Stormwater Grant projects require a Conceptual Stormwater Management Plan as part of their applications for grant funding. The applicant is referred to the **Stormwater Grant Application Guide** water.phila.gov/pool/files /stormwater-grants-application-guide.pdf on the **Stormwater Grants** water.phila.gov/stormwater/incentives /grants/ website for a full review of requirements for application review and completion. Stormwater Billing and Incentives reviews Stormwater Grant Applications and provides technical assistance for determining Stormwater Grant award recipients.

Alternative Conceptual Review

Most projects that receive this type of review fall into the two following groups:

Stormwater Retrofit Projects Not Funded by Stormwater Grants

Stormwater Retrofit projects that are not Stormwater Grant recipients should contact Stormwater Billing and Incentives as soon as possible. These projects will submit an ERSA Application (Section 2.1 water.phila.gov/development/stormwater-plan-review/manual/chapter-2/2-1-existing-resources-and-site-analysis) and be reviewed by Stormwater Billing and Incentives.

Significant Changes to Approved Application Conceptual Stormwater Management Plan

All Stormwater Grant recipients should design their project according to their Conceptual Stormwater Management Plan submitted with their Stormwater Grant Application. If significant changes are made from the awarded conceptual design, applicants should contact Stormwater Billing and Incentives as soon as possible. Projects are awarded based on the Conceptual Stormwater Management Plan provided in an application and are expected to match these plans as closely as technically possible. If the project must be altered significantly due to technical challenges or any other reason, Stormwater Billing and Incentives may re-evaluate the effectiveness and scope of the project.

Submission Package Components

Projects applying for a Stormwater Grant should follow the procedures outlined in the **Stormwater Grants Application Guide** water.phila.gov/pool/files/stormwater-grants-application-guide.pdf.

No Conceptual Stormwater Management Plan Approval Fee is required for Stormwater Retrofits.

Below are requirements for projects under the Alternative Conceptual Review category.

Conceptual Stormwater Management Plan

- In preparing the proposed stormwater management strategy for the project site, the applicant must use the stormwater management design process detailed in **Chapter 3** water.phila.gov/development /stormwater-plan-review/manual/chapter-3.
- Construction details should not be submitted with the Conceptual Stormwater Management Plan.
- A sample Conceptual Stormwater Management Plan is available at the PWD Development Services Resource Directory water.phila.gov/development/resources/ for the applicant's reference.

Submission and Review Process

- Projects applying for a Stormwater Grant should hold a pre-application meeting with Stormwater Billing
 and Incentives at least one month before the grant deadline. These meetings provide Stormwater Billing
 and Incentives with the opportunity to issue any comments on the draft Conceptual Stormwater
 Management Plan and application presented. Applicants can then modify their Conceptual Stormwater
 Management Plans and application accordingly and submit by the posted Stormwater Grant deadline.
 Stormwater Billing and Incentives will review the applications and present their findings to a PWD
 Review Board who will ultimately decide the Stormwater Grant recipients.
- Stormwater Retrofit projects that are not applying for a Stormwater Grant should submit their Conceptual Review Phase Submission as a component of a complete ERSA Application Submission Package (Section 2.1.1 w water.phila.gov/development/stormwater-plan-review/manual/chapter-2/2-1-existing -resources-and-site-analysis#2.1.1) through the Project Dashboard on the PWD Stormwater Plan Review www.pwdplanreview.org website.
- The applicant will receive an automatic email confirmation that the submission has been received.

Figure 2.3-11: Stormwater Retrofit Review Path Conceptual Review Phase Flow Chart for Grant Applicants

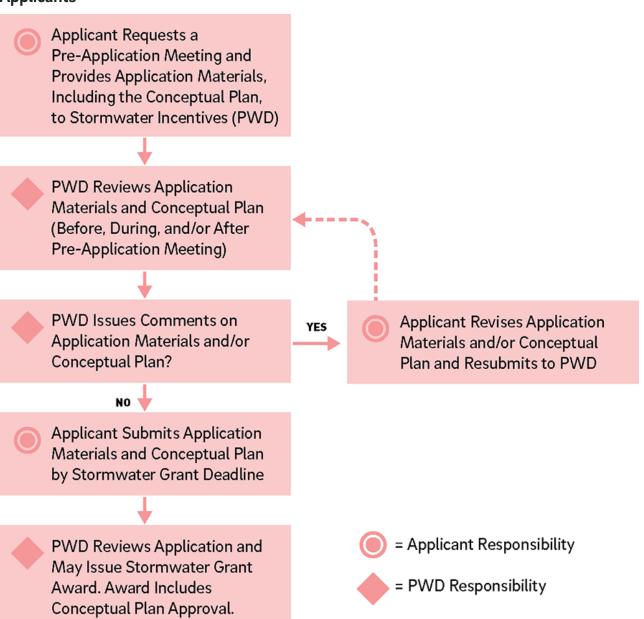
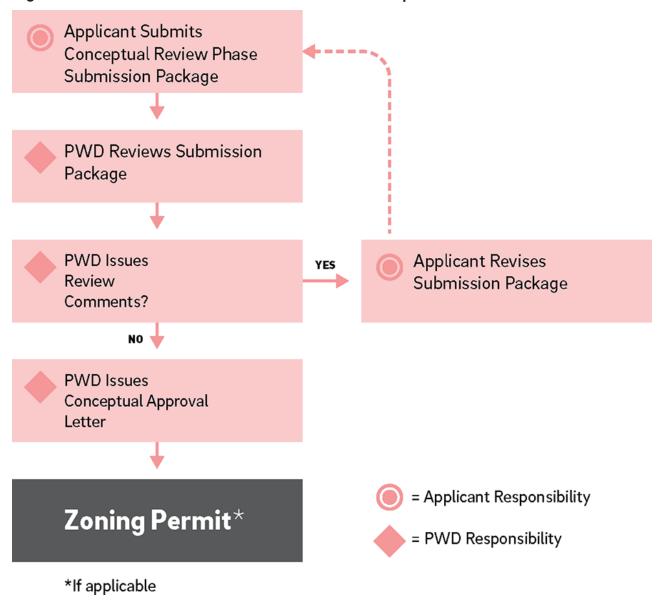


Figure 2.3-12: Stormwater Retrofit Review Path Conceptual Review Phase Flow Chart, Alternative



Expiration Policy

For Stormwater Grant-funded Stormwater Retrofits, a Conceptual Approval, which is automatic with notice of a Stormwater Grant award, is valid for six months after the grant manager signs the Subgrant Agreement. If a PCSMP Review Phase Submission Package cannot be submitted within six months of signing the Subgrant Agreement, the applicant must contact Stormwater Billing and Incentives as soon as possible. Applicants for Stormwater Retrofits that are not funded by Stormwater Grants should contact **Stormwater Billing and Incentives** water.phila.gov/development/stormwater-plan-review/manual/introduction#4 for more information on expiration policies.

PCSMP Review Phase

The PCSMP Review Phase follows approval of a Stormwater Retrofit Conceptual Stormwater Management Plan, either by notice of award of a Stormwater Grant or Conceptual Approval through the Alternative Concept Review Path. This is PWD's final review before construction. At the end of this Review Phase, PWD will issue a PCSMP Approval Letter. PCSMP Approval is not a permit, but rather one of many prerequisite materials that must be presented for obtaining permits, such as a required plumbing permit. PCSMP Approval must be obtained before earth disturbance activities can begin.

The site layout and stormwater management design included with the PCSMP Review Phase Submission Package must be consistent with the design that was approved during the Conceptual Review Phase. If major changes are made to the project after PWD issues a Conceptual Approval Letter, the applicant must contact PWD to determine if a revised Conceptual Approval Letter is needed before proceeding to the PCSMP Review Phase. Stormwater Billing and Incentives may re-evaluate Stormwater Grant funding awarded for projects with PCSMP Review Phase submissions that significantly vary from their awarded Conceptual Stormwater Management Plan in their Stormwater Grant Application. Examples of major changes that would require a new Conceptual Approval include, but are not limited to:

- Changes in proposed LOD;
- Changes in proposed impervious area (such as building footprint or location);
- · Changes in stormwater routing; and
- Changes in the type, placement, sizing, and/or location of SMPs or changes to the stormwater management strategy.

There are no expedited reviews for Stormwater Retrofits. Reviews can be expected within two weeks from submission.

No PCSMP Submittal Fee is required for Stormwater Retrofits.

Quick Tip

It is the applicant's responsibility to determine whether their project must comply with other PWD, City, State, or Federal permit requirements. At a minimum, Stormwater Retrofit Projects must apply for an L&I Plumbing permit. The applicant is referred to **Section 2.5 ►** water.phila.gov /development/stormwater-plan-review /manual/chapter-2/2-5-pwds -development-review-process, **Section 2.6 ►** water.phila.gov /development/stormwater-plan-review /manual/chapter-2/2-6-pwds-role-in -philadelphias-development-process, and Section 2.7 water.phila.gov /development/stormwater-plan-review /manual/chapter-2/2-7-pwd-and -pennsylvania-department-of -environmental-protection for more information. If uncertain about how to proceed, the applicant is encouraged to contact **Stormwater** Billing and Incentives • water.phila.gov/development

water.phila.gov/development /stormwater-plan-review/manual /introduction#4 at any point in the submission and review process.

Submission Package Components

Final Construction Drawings

- All plans must be signed and sealed by a Professional Engineer licensed in the Commonwealth of Pennsylvania. Each plan sheet of the plan set must have an electronic signature and seal.
- All plans must meet general plan sheet requirements listed in Appendix E, Table E-1 water.phila.gov /development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-1-general-plan-sheet-requirements.
- The following items must be incorporated into the Final Construction Drawings:
 - Existing Conditions Plan that meets all requirements listed in Section 2.1.1 w water.phila.gov /development/stormwater-plan-review/manual/chapter-2/2-1-existing-resources-and-site-analysis#2.1.1,
 - Demolition Plan (if applicable),
 - Site Plan,
 - Grading and utility information,
 - Landscaping information, and
 - Construction details.

Post-Construction Stormwater Management Plan Package

- Post-Construction Stormwater Management Plan
 - The PCSMP is a set of engineering drawings depicting the post-development conditions and postconstruction stormwater management design of a project. The PCSMP drawings and Final Construction Drawings do not necessarily have to be separate plans; they may be combined into a singular plan set.
 - The PCSMP must be signed and sealed by a Professional Engineer licensed in the Commonwealth of Pennsylvania. Each plan sheet of the plan set must have an electronic signature and seal.
 - Drawings must contain appropriate sequences of construction for each SMP (Chapter 4 water.phila.gov/development/stormwater-plan-review/manual/chapter-4).
 - Grading and utility information, landscaping information, and SMP construction details, must be either incorporated into PCSMP drawings or provided as separate plan sheets.
- E&S Plan
 - The E&S Plan displays the post-construction condition along with other site characteristics related to the earth disturbance activities and proposed E&S measures for a project site.
 - The E&S Plan must include a LOD line type which is drawn around all proposed site features, E&S controls, and other areas that may be disturbed over the course of construction for activities such as construction staging, re-grading, demolition, etc. The applicant is advised to be conservative when estimating the LOD to avoid proceeding along the wrong Review Path, which could lead to costly delays, change orders, and enforcement action during construction. PWD typically observes LODs in the field to be larger than what is proposed on the plans. A numerical value for the LOD must be clearly displayed on the E&S Plan.

- The E&S Plan must be prepared in accordance with the *PA DEP Erosion and Sediment Pollution Control Program Manual* → https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt /Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest), Chapter 1 Required E&S Plan Content. E&S measures are referred to as E&S Best Management Practices (BMPs) in the PA DEP Manual.
- The E&S Plan must also comply with the following requirements specific to PWD. Should E&S Plan requirements conflict between PA DEP and PWD, the applicant is to follow the specific PWD E&S Plan requirements presented in this Manual.
 - All requirements listed in Appendix E, Table E-4: Erosion and Sediment Control Plan

 Requirements water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and
 -report-checklists/table-e-4-erosion-and-sediment-control-plan-requirements must be met.
 - All Standard E&S Notes listed in Appendix E, Table E-5: Standard Erosion and Sediment Control Notes w water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report -checklists/table-e-5-standard-erosion-and-sediment-control-notes must be included.
 - All Standard Sequence of Construction Notes listed in Appendix E, Table E-6: Standard Sequence of Construction Notes water.phila.gov/development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-6-standard-sequence-of-construction-notes must be included.
 - Standard construction details must be included from the PA DEP Erosion and Sediment Pollution Control Program Manual https://www.dep.pa.gov/Business/Water/CleanWater/StormwaterMgmt/Stormwater%20Construction/Pages/E-S%20Resources.aspx (2012 or latest) for the following E&S measures: inlet protection, silt fence and/or compost filter sock, rock filter outlet, rock construction entrance, concrete washout station, dust control, and pumped water filter bag. If any of these E&S measures do not apply to the project site, justification must be provided as a note on the E&S Plan.
- A sample E&S Plan is available at the PWD Development Services Resource Directory water.phila.gov/development/resources/ for the applicant's reference.
- Post-Construction Stormwater Management Plan Report
 - The PCSMP Report contains a detailed discussion of the proposed Stormwater Retrofit and its impacts to the volume, rate, and quality of stormwater runoff from the site. It also contains descriptions of the project site, stormwater management criteria, calculations, maps, and other supporting documentation. The applicant may refer to Chapter 3 w water.phila.gov/development /stormwater-plan-review/manual/chapter-3 for information on stormwater management criteria and calculations.
 - The PCSMP Report must be electronically signed and sealed by a Professional Engineer licensed in the Commonwealth of Pennsylvania.
 - Specific requirements for the PCSMP Report are listed in Appendix E, Table E-7 water.phila.gov /development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-7-post -construction-stormwater-management-plan-report-requirements.
 - Stormwater Retrofit projects have more limited project scopes for the PCSMP Report than other development projects. If an applicant has any questions on the requirements, they are encouraged to contact Stormwater Billing and Incentives w water.phila.gov/development/stormwater-plan-review /manual/introduction#4.

- Operations and Maintenance Agreement Information
 - An O&M Agreement between the property owner and PWD is a component of PCSMP Approval and required of any project receiving Stormwater Grant funding to implement a Stormwater Retrofit. This Agreement requires the property owner at the time of development to construct SMPs on the listed parcel(s) in strict accordance with the Approved PCSMP and to maintain the SMPs such that they will adequately perform their designed functions. It also requires the property owner to maintain the site in accordance with the Approved PCSMP, prohibiting alterations including the conversion of pervious areas to impervious cover without authorization from PWD. It does not require the property owner to construct the SMPs if the development project associated with the SMPs does not commence or if no earth disturbance takes place. The Agreement is recorded against the property and runs with the land, if and when the property is sold or otherwise conveyed.
 - The "Operations and Maintenance Agreement Information" section of the Online Technical Worksheet must be filled out with current property(ies) and ownership information including the subject property's(ies') address(es), OPA Account Number(s), owner name(s), and the name(s), business title(s), address(es), and email address(es) of the Agreement's proposed signatory(ies). The "Notes" text field, in addition to supplemental pages, may be used for the additional property and owner information required of projects involving multiple properties.
 - The following signatory business titles are acceptable. For all others, the business title must be listed, and a letter of authorization from the acceptable business title for the signatory confirming their ability to bind the owner organization in legal agreements must be submitted.
 - o Corporations: President or Vice President
 - Limited Partnership (LP): General Partner
 - Limited Liability Corporation (LLC): Member or Manager
 - The most recent executed deed(s) demonstrating the current ownership of the property(ies) must be submitted.
 - The most recent legal description(s) of the property(ies) in an electronically editable (Word document) format must be submitted.
 - For further details regarding when and how this part of the process is completed, the applicant is referred to the Submission and Review Process section below.
- SMP Maintenance Guide
 - Prepared by the project's designer and submitted to PWD as part of the PCSMP Review Phase.
 - SMP Maintenance Guides are SMP- and site-specific and should be provided to and implemented by the property owner as a guide for long-term operations and maintenance of the SMPs on-site.
 - The SMP Maintenance Guide must include a Site Map and a separate Maintenance Schedule Form for each SMP to allow the property owner to track all maintenance activities for their site.
 - The SMP Maintenance Guide must be updated and resubmitted with all field changes.
 - The applicant is referred to Appendix G → water.phila.gov/development/stormwater-plan-review/manual /appendices/g-smp-maintenance-guide-documents/ for an SMP Maintenance Guide sample and associated template documents.

Proof of Application for Applicable State and Federal Permits

The applicant must prove that they have applied for all applicable permits within the initial submission for PCSMP Review to proceed. To provide proof of application, the applicant must submit copies of permit applications, application receipts, or notification letters from relevant agencies.

- Applicable permits include various State and Federal permits that may be required for development on a given site.
- If the project will involve earth disturbance of more than one acre, the applicant may need to obtain a PA DEP General (PAG-02) National Pollutant Discharge Elimination System (NPDES) Permit or Individual NPDES Permit for Stormwater Discharges Associated with Construction Activities.
- For Pennsylvania Land Recycling Program (Act 2) sites, proof of notice to PA DEP for both an intent to remediate and notification of work to an existing Act 2 site is required.
 - The applicant can submit notification correspondence through PA DEP's OnBase form upload system ► https://www.dep.pa.gov/DataandTools/Pages/Application-Form-Upload.aspx.
 - The PA DEP Environmental Cleanup and Brownfields program's resource account email address is RA-EP-SEROECB@pa.gov.
- It is the applicant's responsibility to determine which permits are required by other regulatory agencies for a project. The applicant is referred to Section 2.6 www water.phila.gov/development/stormwater-plan-review /manual/chapter-2/2-6-pwds-role-in-philadelphias-development-process for information on Zoning Code requirements and to Section 2.7 www water.phila.gov/development/stormwater-plan-review/manual/chapter-2/2 -7-pwd-and-pennsylvania-department-of-environmental-protection for information on NPDES Permit requirements.

Submission and Review Process

- The applicant submits a complete PCSMP Review Phase Submission Package to PWD through the Project Dashboard on the PWD Stormwater Plan Review www.pwdplanreview.org website. The PCSMP Review Phase Submission Package will take the place of the Concept Review Phase Submission Package within the ERSA Application for grant-funded Stormwater Retrofit projects with pre-approved Conceptual Stormwater Management Plans.
- PWD conducts an initial PCSMP administrative screening of the submitted materials to confirm that all
 necessary components are included. If any of the PCSMP Review Phase Submission Package
 components are found to be missing or incomplete, PWD will contact the applicant by email.
- Once PWD's PCSMP administrative screening is complete, and PWD has verified the inclusion of all
 components, PWD contacts the applicant via email. During the review, PWD examines the submittal to
 determine if all applicable stormwater management design criteria are met for the project. PWD verifies
 all plans, documents, and calculations are legible, accurate, and consistent.
- If PWD has comments on the submission, PWD issues the comments to the applicant via email. PWD issues all comments in a PCSMP Review letter, which is sent as an attachment to the email. In this email, the reviewer provides their contact information, and the applicant is encouraged to contact the reviewer directly if they have any questions about a particular comment.

- In addition to submitting to Stormwater Billing and Incentives, applicants must submit a Utility Plan to Projects Control. Applicants can wait until Stormwater Billing and Incentives issues comments first to ensure accurate plans, but they must receive Utility Plan Review approval before the PCSMP Review Phase is completed. The applicant is referred to Section 2.5 water.phila.gov/development/stormwater-plan -review/manual/chapter-2/2-5-pwds-development-review-process for more information on Utility Plan Reviews.
- The applicant resubmits to PWD a revised PCSMP Review
 Phase Submission Package that addresses the comments
 through the Project Dashboard on the PWD Stormwater Plan
 Review www.pwdplanreview.org website.
 - Revised submittals must include all required revisions and new material, as well as a response letter addressing each review comment and indicating where the new information can be found.
 - A response letter is required that describes any changes to the design that may not be included within the comment response letter.
 - This can be an iterative process, and PWD does not restrict the number of times an applicant can resubmit. At any time, the applicant or PWD may request a meeting to discuss review comments.
- Once all of the review comments have been addressed by the applicant, PWD will issue an O&M Agreement(s) for signature and notarization. There are no additional review fees for Stormwater Retrofits, but there is an O&M Recording Fee for Stormwater Retrofit projects that must be paid prior to PCSMP Approval.
 - The standard O&M Agreement consists of:
 - Agreement with signature pages;
 - Signatory acknowledgement sections;
 - Exhibit A, legal description(s) of the property(ies);
 - Exhibit B, a list of SMPs to be installed on the listed parcel(s); and
 - Exhibit C, legal description of the SMP area

PWD compiles the signatory sections, the signatory

acknowledgement sections, and Exhibit A, based on the information provided by the applicant within the Online Technical Worksheet, which must be completed and submitted as part of the PCSMP Review Phase Submission Package. Incomplete and/or incorrect information within the Online Technical Worksheet will prevent the issuance of a PCSMP Approval Letter until all omissions and/or discrepancies are addressed. Signatory(ies) of the property owner(s) must be authorized to bind the property owner(s) to legal agreements. The signatory acknowledgement sections must be notarized and serve to verify the identities of all

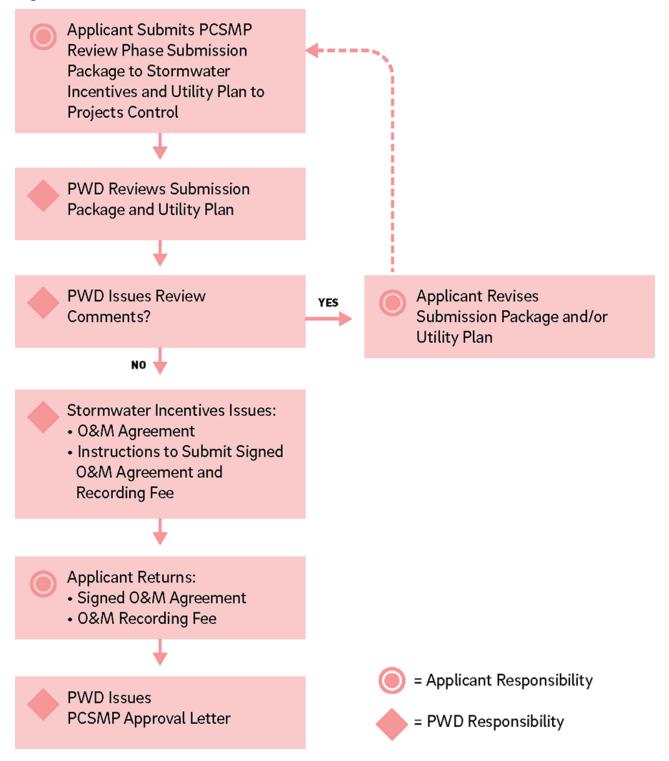
Quick Tip

As described in the introduction of Chapter 2, Stormwater Plan Review and Stormwater Billing and Incentives are part of a larger development review process, and there may be circumstances where Stormwater Plan Review cannot issue PCSMP Approval until comments from another PWD unit, local, State, or Federal agency have been addressed. It is the applicant's responsibility to determine whether the project must comply with other PWD, local, State, or Federal requirements. The applicant is referred to Section 2.5 **☞** water.phila.gov/development /stormwater-plan-review/manual /chapter-2/2-5-pwds-development -review-process, Section 2.6 **■** water.phila.gov/development /stormwater-plan-review/manual /chapter-2/2-6-pwds-role-in -philadelphias-development-process, and Section 2.7 water.phila.gov /development/stormwater-plan-review /manual/chapter-2/2-7-pwd-and -pennsylvania-department-of -environmental-protection for more information.

parties signing the agreement. Exhibit A contains metes-and-bounds descriptions for each parcel in its entirety, on which earth disturbance is proposed. Exhibit B lists all SMPs to be constructed on the listed parcel(s). Exhibit C can be either the property description listed in Exhibit A or a specific surveyed area of the property directly included in SMP design. Should amendments to the O&M Agreement become necessary after execution, the O&M Amendments will be sequentially numbered and will replace and supersede any and all of the project's previous O&M Agreements and Amendments.

- The O&M Agreement Fee is determined by the **fee schedule** www.phila.gov/records/pdfs/FeeSchedule /Fee%20Schedule%207-1-18.pdf established with the City of Philadelphia Department of Records.
- The applicant submits fee payments in the form of a cashier's check, business check, or money order, made payable to "City of Philadelphia." Personal checks will not be accepted, nor will installments.
 The PWD project tracking number must be listed on all checks or included in an accompanying transmittal letter.
- Upon receipt of fee check(s) and two original, signed, and notarized copies of each O&M Agreement, PWD issues a PCSMP Approval Letter via email.
- After issuance of the PCSMP Approval Letter, a representative of PWD will sign the O&M Agreement(s), and the O&M Agreement(s) are then recorded with the City of Philadelphia Department of Records on behalf of the property owner. A copy of the signed, fully executed O&M Agreement(s) will be mailed to the signatory at the conclusion of the recording process.
- The PCSMP Approval Letter can be used to obtain sign-off on the Building Permit.

Figure 2.3-13: Stormwater Retrofit Review Path PCSMP Review Phase Flow Chart



Field Changes

PWD recognizes that design changes may be necessary after PWD issues the PCSMP Approval Letter. If construction must deviate from approved plans, the applicant must contact PWD immediately. Deviations include, but are not limited to:

- Location, size, and/or type of SMPs;
- Infiltration feasibility; and/or
- Other changes in the stormwater conveyance system.

Depending on the extent of the deviation, PWD may request that the applicant submit formally for field change approval. Field changes are given priority in the PCSMP Review queue and will be reviewed as soon as possible. The applicant must speak directly to the assigned reviewer to determine what must be included in the field change submittal.

Field changes for Stormwater Retrofit projects can be submitted to the Stormwater Billing and Incentives reviewer. All Field changes should include a short narrative describing the deviations from the originally approved PCSMP.

At the completion of construction, PWD's Inspections Coordinator must be contacted to schedule a final inspection (Chapter 5 water.phila.gov/development/stormwater-plan-review/manual/chapter-5). This will initiate the Record Drawings Review Phase.

Expiration Policy

For Stormwater Grant-funded Stormwater Retrofits, PCSMP Approval is valid for six months to start construction. If a grant-funded Stormwater Retrofit cannot start construction within six months of the date of PCSMP Approval, the applicant must contact Stormwater Billing and Incentives as soon as possible. Applicants for Stormwater Retrofits that are not funded by Stormwater Grants should contact **Stormwater Billing and Incentives** water.phila.gov/development/stormwater-plan-review/manual/introduction#4 for more information on expiration policies.

Record Drawing Review Phase

The Record Drawing Review Phase is the final Review Phase of the Stormwater Billing and Incentives process for the Stormwater Retrofit Review Path. A project is eligible to submit for the Record Drawing Review Phase once construction activities are substantially complete.

PWD uses a project's Record Drawings to verify compliance of the constructed site with stormwater management design criteria and to document and verify the quantity of stormwater managed on a site. It is critical that the Record Drawings reflect any changes from the Approved PCSMP design, approved field changes or otherwise, that may affect the performance of the SMPs. The Record Drawing Review Phase is complete when the applicant receives a letter confirming that the Record Drawing(s) are in general accordance with the Approved PCSMP.

Throughout construction, the contractor or engineer must document all SMP installations by measuring and taking photographs of key structure placements. The contractor must also keep the Approved PCSMP on-site

at all times throughout the construction process and document all changes from the Approved PSCMP as they occur. PWD recommends marking up and tracking changes on an actual copy of the Approved PCSMP to simplify preparation of the Record Drawings. Using the Approved PCSMP as a base, the Record Drawings should highlight information confirmed to be in accordance with the Approved PCSMP in yellow and identify any deviations in red ink. The Record Drawings must be clear and legible.

Submission Package Components

The Record Drawing Review Phase Submission Package consists of materials listed in **Figure 2.3-6** p. 16, which must be submitted to PWD for review after the final inspection has been completed. All submissions must be made through the Project Dashboard on the **PWD Stormwater Plan Review** www.pwdplanreview.org website. All submissions should include the applicant's contact information if the submission is being made by a different engineering firm than that of the original ERSA Application.

Record Drawings

- The Record Drawings may be prepared by Professional Engineers, Registered Architects, Landscape
 Architects, Professional Land Surveyors, Professional Geologists, and Contractors licensed in the
 Commonwealth of Pennsylvania. The preparer of the plan must display prominently their signature and
 professional seal, or, in the case of Licensed Contractors, their signature and L&I Contractor License
 Number, on each Record Drawing plan sheet. (PA DEP may have different requirements concerning the
 types of professionals who may prepare Record Drawings. For projects that require a NPDES Permit, the
 applicant is strongly encouraged to refer to PA DEP's requirements for Record Drawings before selecting
 a professional to prepare Record Drawing(s) for PWD.)
- The Record Drawing(s) must meet all requirements listed in Appendix E, Table E-8 water.phila.gov /development/stormwater-plan-review/manual/appendices/e-plan-and-report-checklists/table-e-8-record-drawing -requirements.
- The applicant is referred to Appendix K w water.phila.gov/development/stormwater-plan-review/manual /appendices/k-record-drawing-sample for a sample Record Drawing.
- The applicant is referred to Section 5.3.2 water.phila.gov/development/stormwater-plan-review/manual /chapter-5/5-3-construction-documentation#5.3.2 for more information on Record Drawing construction documentation.

Construction Photographs

- Stormwater Retrofit projects generally require photographic documentation of key installations, but do not require material receipts.
- The applicant is referred to Section 5.3.1 water.phila.gov/development/stormwater-plan-review/manual /chapter-5/5-3-construction-documentation#5.3.1 for more information on documentation during construction but does not need to submit a full Construction Certification Package for Stormwater Retrofit projects.

Submission and Review Process

- The applicant submits the completed Record Drawings and construction photographs to PWD. If any changes occurred during construction that resulted in different drainage area delineations, new drainage area plans should be submitted, as well.
- PWD reviews the submitted Record Drawing(s) and construction photographs to ensure that the project has been constructed in accordance with the project's Approved PCSMP.
- Upon review, PWD will issue comments on the submission via email.
 - If the submitted Record Drawings are determined to be incomplete, the applicant must modify and/or add to the Record Drawings per the comments contained in the letter. Depending on the number and complexity of review comments, the applicant may choose to include a response letter addressing each review comment.
 - If the submitted Record Drawings are determined to be complete, but constructed conditions differ from the Approved PCSMP, PWD may require the applicant to submit calculations prepared by a qualified design professional demonstrating that the SMPs meet stormwater management design criteria. Specifically, PWD may check the SMP storage volume, release rate, drainage areas, and other items that affect an SMP's performance (Chapter 3 water.phila.gov/development/stormwater-plan -review/manual/chapter-3). If the applicant cannot demonstrate compliance with the applicable stormwater management design criteria, PWD will request that the applicant outline corrective actions to bring the project into compliance. Once corrective actions have been performed, the applicant must contact PWD to re-inspect. If necessary, the applicant must submit requested materials to the Stormwater Billing and Incentives reviewer.
 - If the Record Drawings are determined to be in general accordance with the Approved PCSMP, PWD will issue a letter via email stating as such. Once the closeout process is complete, in accordance with Appendix M water.phila.gov/development/stormwater-plan-review/manual/appendices/m-pcsmp-project -closeout/, PWD will resolve the "Hold Permit Completion" on the "PWD Stormwater Mgmt. Review" for the associated L&I building permit(s) in eCLIPSE www.phila.gov/departments/department-of -licenses-and-inspections/eclipse-faqs/.

Most non-residential and condominium projects that comply with Stormwater Regulations per a Record Drawing review and final inspection may be eligible for stormwater credits. A **Stormwater Credits Application (Form B)** www.pwdplanreview.org/upload/pdf/Form_B_20190409.pdf may be submitted to Stormwater Billing and Incentives for review once the previously outlined steps are completed. For additional information on stormwater credits, the applicant is referred to **Section 6.3** water.phila.gov /development/stormwater-plan-review/manual/chapter-6/6-3-stormwater-credits/.

Figure 2.3-14: Stormwater Retrofit Review Path Record Drawing Review Phase Flow Chart

