



**DIVISION OF PLANNING & PERMITTING
FREDERICK COUNTY, MARYLAND**

30 North Market Street • Frederick, Maryland 21701
Phone (301) 600-1138 • Fax (301) 600-1645 <http://www.frederickcountymd.gov>

Signature Set-Approved Improvement Plans

Unfolded plans are not accepted, you will be called or emailed to come in and fold plans at your convenience, Mon-Fri 8am-4pm

Improvement Plan - S/SP _____ A/P# _____

Subdivision /Site Name _____

Engineering- Improvement plans
Submission requirements:

VKapoor
File #:
A/P #:

4 copies Final approved plan set (folded 8-1/2 x 11)

4 CD/DVD (Both PDF&CAD)
Final Approved plan set to included SWM Computations,
DA Maps and CAD files digital Submission Standards

The Applicant hereby certifies under the penalties of perjury, and agrees as follows: 1) That he/she is authorized to make this application on behalf of all property owners, 2) That the information is correct, 3) That he/she will comply will all regulations of Frederick County, which are applicable hereto.

Printed name of Owner or Agent

Signature of Owner or Agent

Digital Submission Standards

These Digital Submissions Standards ensure county acquisition of scanned plans and computer-aided drafting and design drawings. Digital submissions improve the efficiency of the plan routing and asset management.

I. General Submission Standards are as follows:

- a. Final or AS-Built Division of Planning and Permitting submission form required (form dependent on development stage.)
- b. Preferred plan coordinate reference system is Maryland State Plan, NAD83 (North American Datum, 1983), units in U.S. Survey Feet (NAD_1983_StatePlane_Maryland_FIPS_1900_Feet.)
- c. Each plan or plat drawing shall contain four Maryland State Plane Coordinate control points as tick references and shall be annotated with the actual x,y coordinate in U.S. Survey Feet.
- d. An industry standard quality CD-R or DVD compact disc shall be submitted with the following contents:
 - 1. PDF of plans done to standards set in Section II of this document.
 - 2. AutoCAD 2004 or newer file formats (.DWG or .DXF.) done to standards set in Section III of this document.
 - 3. Disc Label with:

- a. Project Name
- b. Project Number

II. PDF Submission Standards are as follows:

- a. The plans shall be submitted in **one** multipage PDF
- b. PDF submitted **shall not** have any pdf document restrictions (i.e. password protected, printing not allowed, etc.)
- c. The PDF submitted shall be named with the following convention: PlanTitle_Project#_Date(Approved Date if Approved Plan, Submitted Date if in Review Stages, with separating underscores).
- d. All plans shall have stormwater facility and drainage area computations for all stormwater facilities.
- e. All plans shall have stormwater drainage area drawings for all plans with stormwater drainage features.
- f. All plans shall indicate ownership and maintenance responsibility of ESD/NPDES facilities (i.e. private, HOA, or government entity).
- g. All plans shall be **legible** in black and white and As-Built legible in black, white and red.

III. AutoCAD Submission Standards are as follows:

- a. AutoCAD layers must follow the conventions in Section III.d. of this document or follow current National CAD Standards. Section III.d. represents the *minimum** layer naming status, groups and names for submittal. *Note minimum only refers to the amount of levels in a layer name, not the amount of layers as some layers may not be applicable.
- b. All digital line, polygon and point data will be created with snapping to ensure topologically correct conveyances. Polygons will close without gaps.
- c. AutoCAD files will be verified, and if inaccurate, will need to be corrected and the drawing resubmitted.
- d. **CAD Layer Specific Requirements are as follows:**
 - 1. Stormwater management/storm drain easements must have Liber and Folio information included in the SWM-ESMT-LABL layer.
 - 2. Drainage area acreage labels must be included in the STRM-DRAIN-LABL and SWM-DRAIN-LABL layers.
 - 3. Within a specific layer, from the Standardized CAD Layer Names and Definitions table below, only features that match its CAD description will be in that specific layer.
 - 4. **Layer Naming Convention:**

STATUS-MAJOR-MINOR-MINOR

Where: STATUS = a mandatory single character field indicating the current status of a feature.
 MAJOR = a mandatory 4 character field that identifies a major building system.
 MINOR = a mandatory 4 character field that further defines what feature is being captured.
 MINOR = an optional 4 character field that further defines what feature is being captured.

Below are lists of the names and definitions of: status, groups, and layers.

Status Definitions	
E	Existing
P, D, N, OR ASB	Proposed, Design, New Work, OR As-Built*

*Please only use one status definition from the choices of: P, D, N or ASB, that best represents your business process.

Common Major Group Names	
ESMT	Easements
PROT	Fire Protection
SSWR	Sanitary Sewer
STRM	Storm Sewer
SWMT	StormwaterManagement
WATR	Water Supply

Common Minor Group Names	
DTCH	Ditches, Channels, Trenches
DRAN	Drainage Areas
FACL	Facilities (StormwaterManagement)
HYDT	Hydrants and Connections
PIPE	Piping
STRC	Structures
LABL	Labels

Listed below are a series of pre-established layer names for common items within a plan set. The county encourages surveyors and engineers are to include additional layers in their digital submittal. Any additional layers submitted must follow the established naming convention and be given a description of what the layer contains.

Standardized CAD Layer Names and Definitions	
Layer Name	Description
E-STRM-PIPE	Existing, Storm Drain Pipes
E-STRM-PIPE-LABL	Existing, Storm Drain Pipes, Labels
P-STRM-PIPE	Proposed, Storm Drain Pipes
P-STRM-PIPE-LABL	Proposed, Storm Drain Pipes, Labels
E-STRM-STRC	Existing, Storm Drain Structures
E-STRM-STRC-LABL	Existing, Storm Drain Structures, Labels
P-STRM-STRC	Proposed, Storm Drain Structures
P-STRM-STRC-LABL	Proposed, Storm Drain Structures, Labels
E-STRM-STRC-DRAN	Existing, Storm Drain Structures Drainage Areas
E-STRM-STRC-DRAN-LABL	Existing, Storm Drain Structures Drainage Areas, Labels
P-STRM-STRC-DRAN	Proposed, Storm Drain Structures Drainage Areas
P-STRM-STRC-DRAN-LABL	Proposed, Storm Drain Structures Drainage Areas, Labels
E-STRM-DTCH	Existing, Storm Drain Conveyance (Ditches, Channels, Trenches)
E-STRM-DTCH-LABL	Existing, Storm Drain Conveyance (Ditches, Channels, Trenches), Labels
P-STRM-DTCH	Proposed, Storm Drain Conveyance (Ditches, Channels, Trenches)
P-STRM-DTCH-LABL	Proposed Storm Drain Conveyance (Ditches, Channels, Trenches), Labels
E-SWMT-FACL	Existing, Stormwater Management Facilities
E-SWMT-FACL-LABL	Existing, Stormwater Management Facilities, Labels
P-SWMT-FACL	Proposed, Stormwater Management Facilities
P-SWMT-FACL-LABL	Proposed, Stormwater Management Facilities, Labels
E-SWMT-DRAN	Existing, Stormwater Management Facilities Drainage Areas
E-SWMT-DRAN-LABL	Existing, Stormwater Management Facilities Drainage Areas, Labels
P-SWMT-DRAN	Proposed, Stormwater Management Facilities Drainage Areas
P-SWMT-DRAN-LABL	Proposed, Stormwater Management Facilities Drainage Areas, Labels
E-ESMT-SWMT	Existing, Stormwater Management Easements
E-ESMT-SWMT-LABL	Existing, Stormwater Management Easements, Labels
P-ESMT-SWMT	Proposed, Stormwater Management Easements
P-ESMT-SWMT-LABL	Proposed, Stormwater Management Easements, Labels
E-WATR-PIPE	Existing, Water Service Pipes
E-WATR-PIPE-LABL	Existing, Water Service Pipes, Labels
P-WATR-PIPE	Proposed, Water Service Pipes
P-WATR-PIPE-LABL	Proposed, Water Service Pipes, Labels
E-WATR-STRC	Existing, Water Service Structures
E-WATR-STRC-LABL	Existing, Water Service Structures, Labels
P-WATR-STRC	Proposed, Water Service Structures
P-WATR-STRC-LABL	Proposed, Water Service Structures, Labels
E-ESMT-WATR	Existing, Water Service Easements
E-ESMT-WATR-LABL	Existing, Water Service Easements, Labels
P-ESMT-WATR	Proposed, Water Service Easements
ESMT-WATR-LABL	Proposed, Water Service Easements, Labels
E-PROT-HYDT	Existing, Fire Protection: Hydrants and Connections
E-PROT-HYDT-LABL	Existing, Fire Protection: Hydrants and Connections, Labels
P-PROT-HYDT	Proposed, Fire Protection: Hydrants and Connections

P-PROT-HYDT-LABL	Proposed, Fire Protection: Hydrants and Connections, Labels
E-SSWR-PIPE	Existing, Sewer System Pipes
E-SSWR-PIPE-LABL	Existing, Sewer System Pipes, Labels
P-SSWR-PIPE	Proposed, Sewer System Pipes
P-SSWR-PIPE-LABL	Proposed, Sewer System Pipes, Labels
E-SSWR-STRC	Existing, Sewer System Structures
E-SSWR-STRC-LABL	Existing, Sewer System Structures, Labels
P-SSWR-STRC	Proposed, Sewer System Structures
P-SSWR-STRC-LABL	Proposed, Sewer System Structures, Labels
E-ESMT-SSWR	Existing, Sewer System Easements
E-ESMT-SSWR-LABL	Existing, Sewer System Easements, Labels
P-ESMT-SSWR	Proposed, Sewer System Easements
P-ESMT-SSWR-LABL	Proposed, Sewer System Easements, Labels

****Internal Use only****

Dev Rev Tech (AReed)

As-Built required

As-Built not required

Engineering- Improvement plans

6 copies - Agencies to be routed signature set:

2 + 1 CD/DVD DUSWME

2 + 1 CD/DVD DPW (Blair Hovatter)

1 CD/DVD Engineering (Vijay Kapoor)

1 CD/DVD IIT CAD File standards (Mary McCullough)