

**Delaware County Engineer's Office (DCEO)**  
**Commercial Final Engineering Plan**  
**Review Checklist**

**Project Name:** \_\_\_\_\_

**Submittal Items included with Plans– All references included in this checklist (such as Art. IV, Section 401, etc.), refer to the Delaware County Engineer's Design, Construction and Surveying Standards Manual, current edition, including the Supplemental Specifications to the Standards.**

Yes  No  N/A PDFs of the plans, storm reports, traffic study (if applicable), etc. shall be all submittals

Yes  No  N/A It is recommended that the commercial final engineering plan checklist on the website is reviewed in preparing the plans.

Yes  No  N/A Proper fees, including fee submission checklist been submitted? The fee submission checklist is near the top of the Development Webpage <https://engineer.co.delaware.oh.us/development/development-resources/> . The review fees cover 2 submittals. Additional Submittals beyond the first two may result in additional fees being required for additional review.

Yes  No  N/A Traffic Impact Study (TIS) prepared (only applies to applicable commercial developments –see Supplemental Specifications for TIS requirements). The final approved TIS must be provided before the plans can be approved.

Yes  No  N/A Existing Topographic Survey - Incorporated into the Plan Sheet(s)

Yes  No  N/A Drainage Easements and/or R/W Conveyance Instruments, Metes and Bounds Descriptions, and associated Exhibits provided (If applicable – typically for any off-site easements – easements must state their purpose, such as “for drainage purposes”).

Yes  No  N/A If the proposed R/W is being provided in fee (W.D. warranty deed), when is the closing scheduled? Note that the property cannot transfer until the deed has been recorded by our office.

Yes  No  N/A Storm Water Management Report with all the various calculations and predevelopment and post-development tributary maps (See Article IV, Section 403 E, Art. IX and the Supplemental Specifications)

Yes  No  N/A For proposed improvements to existing County/Township Road including roadway, shoulder and ditch improvements, additional plan sheets and a cost estimate are required (see separate Road Widening Checklist in the Supplemental Specifications)

Yes  No  N/A Be sure to provide plans to the local fire department for review.

Yes  No  N/A Also be sure to provide plans to the local zoning inspector for review.

Yes  No  N/A Engineer's Estimate based on Delaware County Engineer's Unit Bid Prices (Article 403 A - for publicly inspected items only– See Art. IX and the Supplemental Specifications for guidance regarding how to format the estimate.)

Yes  No  N/A Copies of approved environmental documents, Army Corps of Engineers permits, ODNR permits and other permits submitted before final plan approval (Article 401 A)

Yes  No  N/A OEPA Storm water NOI submitted before final plans approval

Yes  No  N/A Plan resubmittals shall include written response letter includes the addressing of

previous comments and identifies additions/deletions made to plans since previous submittal (Article 401 A)  
 Yes  No  N/A  
 Construction surety addressed for publicly inspected items (See Article IV, Section 404)  
 Yes  No  N/A  
 Final engineering plan approval will not be granted until the requirements of Article IV, Section 404 and the Supplemental Specifications have been met (See Procedure of Approval).

**Note: The County shall contact the plans submitter if the above items have not been submitted with the plans. Failure to submit the items may result in delay or halting of the review process.**

**Title Sheet - A sample title sheet layout is available from DCEO. Please contact this office for a copy.**

Yes  No  N/A Name of Project  
 Yes  No  N/A Location by Range, Township, Quarter-Township, Farm Lot (U.S.M. Lands), and/or Virginia Military Survey Name and Number  
 Yes  No  N/A North Arrow  
 Yes  No  N/A A clearly legible location map showing the location of the project with respect to the nearest road intersection  
 Yes  No  N/A Written and graphical (bar) scale  
 Yes  No  N/A Name, address, and telephone number of the Design Engineer preparing the plan  
 Yes  No  N/A Signature Line for the County Engineer  
 Yes  No  N/A Signature Line for the County Sanitary Engineer (if applicable). Approval of the County Sanitary Engineer is required before the final engineering plans are approved.  
 Yes  No  N/A Signature Line for Del-Co Water (if applicable)  
 Note: DO NOT PROVIDE SIGNATURE LINES FOR THE COUNTY COMMISSIONERS ON THE TITLE SHEET  
 Yes  No  N/A Applicable Delaware County Standard Drawings referenced by Drawing Number. City of Columbus and/or ODOT standard drawings may be referenced on a project-by-project basis.  
 Yes  No  N/A Index of Sheets  
 Yes  No  N/A Index Map (Showing lot layout)  
 Yes  No  N/A Benchmark list (referenced to USGS datum), Elevations, Designations and Locations  
 Yes  No  N/A Applicable Delaware County Supplemental Specifications referenced by number. City of Columbus and/or ODOT supplemental specifications may be referenced on a project-by-project basis.  
 Yes  No  N/A Owner/Developer's Name, Address, Telephone and Fax Numbers, and Email Address  
 Yes  No  N/A Utility Owner(s) Name, Addresses and Telephone and Fax Numbers  
 Yes  No  N/A Applicable specifications statement per Article IV, Section 402 H provided. (Typically the City of Columbus CMS would be used. Check with DCEO for further guidance.)  
 Yes  No  N/A County Engineer Disclaimer Paragraph: "The Delaware County Engineer's signature on this plan signifies only concurrence with the general purpose and location of the proposed improvements with respect to improvements within the right-of-way, storm water management, erosion and sediment control. All technical details remain the responsibility of the Professional Engineer who prepared and certified these plans."  
 Yes  No  N/A Consultant's Certification Paragraph: "This is to certify that good engineering

practices have been utilized in the design of this project and that all of the minimum standards as delineated in the Delaware County Design, Construction and Surveying Standards Manual have been met, including those standards greater than minimum where, in my opinion, they are needed to protect the safety of the public. Any variances to the above standards are consistent with sound engineering practices and are not detrimental to the public safety and convenience. These variances have been listed herein and have been approved by the Delaware County Engineer.”

Yes  No  N/A  
 Yes  No  N/A  
 Yes  No  N/A  
 Yes  No  N/A

Stamp and Signature of the Design Engineer licensed in the State of Ohio  
Site Data including Total Area and Total Impervious Area  
Change Order (revisions) table  
Variance Table with Approval Dates Shown

## General

Yes  No  N/A

Intersection Sight Distance (ISD) Diagram showing adequate intersection sight distance for the proposed entrance drives(s) per the current ODOT Location and Design (L&D) Manual. (Do not use stopping sight distance tables).

Yes  No  N/A

Have all trees and obstructions within the R/W and sight distance triangle been shown (and designated to be removed) on the ISD diagram?

Yes  No  N/A

For proposed improvements to existing County/Township Road including roadway, shoulder and ditch improvements, additional plan sheets and a cost estimate are required (see separate Road Widening Checklist in the Supplemental Specifications).

Yes  No  N/A

Reference provided to DCEO Standard Drawing DCED-R2130 for all road widening, shoulder and ditch improvements

Yes  No  N/A

Show the Clear Zone Setback line for projects located on County and Township Roads according to the ODOT L&D Manual, current editions. Provide additional utility easements if needed.

Yes  No  N/A

Have drainage easements for road widening and/or a ditch setback been addressed?

Yes  No  N/A

Are existing utilities shown in area of road widening and/or a ditch setback? Have the utilities been called out to be relocated? Have easements been provided for utility relocation or future needs?

Yes  No  N/A

All required warranty deeds for R/W, easements for drainage and/or sight distance shall be recorded prior to final engineering plan approval, unless a final plat is required for the site. Copies of the above documents including the exhibits and legal descriptions shall be submitted to the County Engineer for approval.

Yes  No  N/A

Preliminary Plan submitted and approved (only applies to larger commercial developments – Check with County Engineer if preliminary plan is required.)

Yes  No  N/A

For sites with public roads and/or private roads built to public standards, please refer to and complete the Final Engineering and Construction Plan Review Checklist. A copy of the Final Engineering and Construction Plan Review Checklist must be included with the submittal. Please contact DCEO for guidance regarding when it is required to complete the Final Engineering and Construction Plan Review Checklist.

Yes  No  N/A

General Summary/Table of Estimated Quantities provided?

Yes  No  N/A

General Notes (An ACAD copy of these notes can be obtained from our office.)

Yes  No  N/A

Do the plans contain the standard note about proof surveys being required to confirm elevations, slopes, etc. of storm structures, detention/retention ponds, etc. comply with the approved final engineering and construction plan?

Yes  No  N/A

For Commercial Developments requiring pond construction, an Owners Agreement is required before the plans can be approved by DCEO.

<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Health Department approval provided (If any onsite treatment is shown)? General DESC permit must be approved before final plans can be approved. As-built plans are required for all commercial sites per Article IV, Section 404 and Article X.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Show and Label any FEMA designated Floodway and 100-year Flood Plain Floodway Note provided?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Note any required vehicular access restrictions to public streets. Verify with the approved plat. All driveway access points for the site shall comply with the access management plan for the site and be approved by the County Engineer.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Have plans and plat for all adjoining projects/sites been reviewed to insure the proposed project is compatible, especially drive locations and safety of turning movements entering/exiting the site and adjacent sites?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Are nearby existing adjacent and opposing driveways shown? Are these at safe locations across the streets from each other.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Label Adjacent Property Names, Lot Numbers and Road Names
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Show the Sight Distance Triangle for all proposed driveway(s). Are sight distance easements required? If so, the easements must be recorded prior to final engineering plan approval.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Show and Label all Existing and Proposed R/W, Easements (including type), and No-Build Zones
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	If high voltage power lines on site, has the power company had the chance to review the final plans?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Are any above ground utility structures placed within the drainage areas or installed in a manner that interferes with surface or subsurface drainage (Not permitted)?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Show and Label Centerline, Edge of Pavement (or Back of Curb), and R/W of all adjacent streets.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Label Size, Location, and Type of all Proposed Sidewalks and/or Multi-use paths including all handicap ramps to be built on site or within the Public R/W.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Show and Label all Proposed and/or Existing Ingress/Egress, or Cross Access Easements. Shared access easements shall extend a minimum of 5' beyond the back of curb or edge of pavement for maintenance purposes.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Label the Entrance Drives and Drive Widths. Drive widths provided comply with Township Fire Department requirements (generally 20' minimum width)?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Minimum Driveway Radius (35') provided. A larger radius may be required by DCEO per current County Standard Standards. See Delaware County Standard Drawings (Supplemental Specifications) for further information.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	For drives that enter onto a curb and gutter street, are the details for the drive compatible with the street gutter pan and curb? Curb on the drive shall align with the curb on the street. No snag points are permitted. See DECO Standard Drawings (Supplemental Specifications) for further information.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Drive profile per Art. VIII, Section 802 A?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Township Issues Addressed (Building setbacks, parking, pedestrian path, etc.)
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	North Arrow and Scale
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Typical Pavement Section provided (within R/W) - See Table 801
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Station and offset or GPS coordinates of all publicly maintained structures (Article IV, Section 403 B)
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Check to insure that all cross slopes at all areas of the intersections and/or cul-de-sacs are at 2% or greater slope (no bird baths).

## Master Grading Plan

Yes  No  N/A Has a Master Grading Plan been provided that complies with Art. IV, Section 403 C?

Yes  No  N/A Proper scale used for Master Grading Plan? Check the remaining items in Art. IV, Section 403 C for complete compliance.

Yes  No  N/A One-foot contour lines of the development area. Use of County Auditor's website (DALIS) is acceptable for existing topography.

Yes  No  N/A Existing Contours (dashed) shown?

Yes  No  N/A Proposed Elevations (solid) including Contours and Spot Grades

Yes  No  N/A Storm Sewer Top of Casting & Invert Elevations labeled

Yes  No  N/A North Arrow and Scale

Yes  No  N/A Major Flood Routing (Designated with Unique Arrows defined on legend). Arrows used must be a different symbol than flow routing arrows.

Yes  No  N/A Does the major flood routing for the proposed site affect any property downstream (e.g., existing subdivision, commercial sites, homes, etc.)? If so, the final engineering plans shall meet the requirements of Art. IV, IX, and the Supplemental Specifications.

Yes  No  N/A Is the 100-year flood routing (including water surface elevations) shown and is it adequate?

Yes  No  N/A Elevation of finished floors above 100-year flood (minimum of 1' above 100-year flood)?

Yes  No  N/A Proposed Pad and Finished Floor Elevations provided?

Yes  No  N/A Finished floor elevation >1' above pavement, unless ADA requirements dictate otherwise.

Yes  No  N/A Utility pedestals shall be located outside the 100-year flood elevation along major flood routes.

Yes  No  N/A Proposed grading or spot elevations called out by each building location? Drains away from each building?

Yes  No  N/A Show and Label any FEMA designated Floodway and 100-year Flood Plain.

Yes  No  N/A Floodway Note provided?

Yes  No  N/A Proposed Landscape Mounding Contours

Yes  No  N/A Label Adjacent Property Names, Lot Numbers and Road Names

Yes  No  N/A Existing and proposed utilities shown? (Surface and subsurface)

Yes  No  N/A Size, Slope, Length, and Type of Proposed and Existing Culverts [may be done with profiles]

Yes  No  N/A Size, Type, Length, and Slope of Existing and Proposed Storm Sewers [may be done with profiles]

Yes  No  N/A Storm Sewer and/or Culvert Profiles shown, including material type, size and slope - (must meet County Standards if publicly maintained – provide on separate plan sheet than the Master Grading Plan). If RCP Pipe is spec'd on the plans, the class shall be listed on the profiles, and shall comply with the table in Appendix B of the Standards. Please refer to/complete the Final Engineering and Construction Plan Review Checklist for storm sewer and culvert checklist items for all items that are publicly maintained.

Yes  No  N/A Has ditch protection been called out on the plans such as Rock Channel Protection at storm sewer outlets into and out of ponds, etc? Has the ditch protection been called out based on shear stress calculated per ODOT L & D Manual, current edition (Sections 1102.3 and 1102.4 - 670, 660, 659 protection, RCP)?

Yes  No  N/A Verify that all materials used for storm sewers that will be publicly maintained

Yes  No  N/A meets current County Standards, including the Supplemental Specifications.

Yes  No  N/A Drainage and Backfilling Details - Must comply with County Standards, including the Supplemental Specifications, for all publicly maintained portions of system. Granular backfill must be provided under public and future public roads. Adequate cover provided for the pipe material chosen? See Supplemental Specifications for current requirements.

Yes  No  N/A Station and offset or GPS coordinates of all publicly maintained structures (Article IV, Section 403 B)

Yes  No  N/A Storm sewers aligned perpendicular with streets (not underneath or parallel to curb and gutter) within public R/W?

Yes  No  N/A Proper design year storm used for Drive Pipes (10-year)? Have drive pipes been sized for all drives and shown on the plans? County standards used to compute design year flow (See Art. IX)?

Yes  No  N/A Proper drive pipe length provided per Article VIII, Section 802 H?

Yes  No  N/A Ditch Direction of Flow and Slope shown?

Yes  No  N/A Trees or Landscape Features in R/W? (Not acceptable)

Yes  No  N/A Trees or Landscape Features located on or near stormwater management facilities that are publicly maintained? (Not acceptable)

Yes  No  N/A Overflow elevation

Yes  No  N/A Correct Design Year Storm used for basin sizing (release 100-year post at 2-year pre)?

Yes  No  N/A Ponding Limits and Elevation

Yes  No  N/A Ponding Tabulations (required and provided)

Yes  No  N/A Orifice Plate Details (Not permitted on half-height headwalls)

Yes  No  N/A Do pond, sidewalk, or other embankment locations create any safety issues for vehicles or pedestrians?

Yes  No  N/A Driveway Slope(s) comply with County Standards and Supplemental Specifications (Art. VIII Section 802 and DCEO Standard Drawing)?

Yes  No  N/A Headwall Specifications or DCEO Standard Drawing referenced?

Yes  No  N/A Ditch Direction of Flow and Slope shown?

Yes  No  N/A Cross-sections of Ditches in R/W or within publicly maintained area (at 50-foot spacings)

Yes  No  N/A Spot elevations (minimum of 2, 3 preferred) for area of the proposed driveway radius/curb/edge of pavement

Yes  No  N/A Existing Utilities, Storm Sewers, Culverts, etc. – dashed

Yes  No  N/A Proposed Utilities, Storm Sewers, Culverts, etc. – solid

Yes  No  N/A Key Notes (Legend) identifying all items

Yes  No  N/A Are leach fields, mound systems or other approved on-site sanitary shown on the plans for the lots and existing adjacent lots? Storm water routed anywhere near existing or proposed leach fields or mound systems, potentially creating problems for owners or adjacent owners?

Yes  No  N/A Separate Sanitary Sewer Plans provided for review? If not, check with Sanitary Engineer's Office.

Yes  No  N/A Are we signing the Sanitary Engineer's Plans? If the sanitary sewer goes under any county or township roads, or if any storm sewers going on maintenance are crossing the sanitary sewers, then our office typically sign their Sanitary Plans.

### **Erosion & Sediment Control Plan**

Yes  No  N/A Inlet Protection Locations

Yes  No  N/A Silt Fence Locations

Yes  No  N/A Check Dam Locations

Yes  No  N/A Erosion Control Standards Details

<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	General Notes (See Supplemental Specifications for Notes)
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Sequence of Construction (See Supplemental Specifications for Notes)
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Construction Entrance Location
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Construction Entrance Detail
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Major Flood Routing (Designated with Arrows defined on legend)
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Ditch depth calculations provided in storm report?

### **Existing Topographic Survey – To be included on applicable plan sheets**

<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Show all Existing Features including Structures, Trees, Metes & Bounds, Topography, and Utilities
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Note which Existing Structures are to be Removed
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Benchmark used, referenced to NAV Datum 1929 or 1988
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Legend/Abbreviations
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Additional Surveying Notes (if applicable)

### **Storm water Management Report Requirements and Calculations**

<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Bound (3-ring) report and CD (PDF Format) of Storm water Management Report submitted?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Signature and Stamp of Ohio Registered Professional Engineer
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Plan with tributary areas defined and tributary acreages labeled including offsite tributaries (Article IV, Section 401 A and the Supplemental Specifications).
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Pre-Development and Post- Development Maps provided and comply with Art. IV Section 403 E, Art. IX and the Supplemental Specifications?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Calculations agree with Plan?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Written Explanation/Summary/Narrative provided
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Storm water Management Facility Plan separate from Master Grading Plan (Art. IV, Section 403 D)? Does Storm water Management Facility Plan comply with Art. IV Section 403 D and the Supplemental Specifications?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Summary Table
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Water quantity addressed and complies with Art. IX and Supplemental Specifications?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Water quality addressed and complies with Art. XII and Supplemental Specifications?
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Routing Calculations
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Inflow Hydrographs
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Outflow Hydrographs
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Storm Sewer Design Calculations including 10-yr HGL line
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Calculations and frequencies provided according to Art. IX, Supplemental Specifications (See Table 901), and Article IV, Section 403 D and E. Peak runoff from post-development 100-yr 24-hr storm less than pre-development 2-yr 24-hr storm.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Calculations of the pre-development peak flows from the delineated drainage areas for the 1, 2, 5, 10, 25, 50, and 100-year frequency, 24 hour storms. List the peak flows on the map.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Calculations of the post-development peak flows from the delineated drainage areas for the 1, 2, 5, 10, 25, 50, and 100-year frequency, 24 hour storms. List the peak flows on the map.
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	Drainage maintenance requirements shall be addressed for any storm water running through the site. Contact the Delaware Soil and Water Conservation District (SWCD). (See Art. IV, Section 401 A)
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	If Drainage Maintenance is required, then a cost estimate and signed Drainage Maintenance Petition is required (See Art. IV, Section 404 and the Supplemental

Yes  No  N/A

Specifications).

Exhibit C showing all storm water management items that will be publicly maintained must be included as part of the final engineering plans. The plans cannot be approved without Exhibit C. A copy of a sample Exhibit C can be obtained from DCEO.

Yes  No  N/A

The Exhibit C needs to include the following note: "As-built plans are required to be provided of all ponds, floodroutes, and storm sewers on this Exhibit C as being placed on maintenance to verify that these facilities have been constructed per and meet the intent of the approved engineering plan."

Yes  No  N/A

Ditch flowline elevation. Foreslope and backslope rates shown (e.g. 4:1, 3:1)? See Article IV, Section 403 B

Yes  No  N/A

Proper Method used for Storage (Not Rational Method)  
Is the overall storm water management for the site acceptable? Does it adversely impact property owners downstream? DCEO should go out and review the site drainage.

Yes  No  N/A

If future lots or parcels will need to provide separate detention, has a storm water master plan been provided that covers future lot/parcel requirements and what report assumptions were used?

Yes  No  N/A

Does stormwater report discuss the condition of the outlet(s) immediately downstream of the site? If a longer sewer or culvert, does this need to be camera inspected to confirm the condition of the pipes and joints? Is an adequate outlet provided? Did they shoot survey shots of the inlet and outlet inverts to confirm the slope of the pipe for analyzing the pipe capacity of the outlet? (Article 901)  
Identification of the existing drainage outlet(s) for the site including size, material type, and condition of any storm sewer, culvert, etc. shall be shown. This information shall be based on an onsite investigation and observations of the outlet(s), (e.g., videotape, photographs, etc.).

Yes  No  N/A

Yes  No  N/A

An analysis of the capacity of the drainage outlet(s) for the site and a determination of the adequacy of the outlet(s) under the predevelopment conditions.

### **Suggested Items, But Not Required**

Yes  No  N/A

Label and Dimension Handicap Parking Spaces (must meet all applicable requirements of ADAAG)

Yes  No  N/A

The signs and pavement marking for any private commercial drives entering the public R/W need to comply with the MUTCD. (including stop signs, pavement marking color, etc.). This is a zoning issue, so the Engineer's Office has no jurisdiction in reviewing the details other than asking that the details be shown on the plans.

Yes  No  N/A

If site is a public school, have signage and pavement markings been addressed for school zones (speed zone signs along public road, etc.) ?

Yes  No  N/A

Parking Requirements (spaces provided)

Yes  No  N/A

Show and Label all Types of Curbs, additional Signs, Site Lights, Trash Enclosures, Fire Hydrants, and any Striping

Yes  No  N/A

Standard Detail and/or Cross-Sections for all Types of Curbs, Sidewalks, Walk Expansion/Contract Joint, Delivery Ramps (if applicable), Handicap Signs & Symbols, Drains, Fire Hydrants

Yes  No  N/A

Spot grades for all handicap spaces (max. grade in any direction is 2.0%)

### **Permits**

Yes  No  N/A

Permit Fees paid? Plans must be forwarded to DCEO Permit Department for required permits (i.e. Driveway, etc.). See Art. IV, Section 404.

Yes  No  N/A      Has a DESC permit been obtained? (Required)

## Signed Plans

Yes  No  N/A

ONCE FINAL PLANS ARE APPROVED – DCEO to add a comment that reads: Provide a PDF of the plans signed by the consultant. Then, finally the following: 1 full size approved copy of plans, 1 half size (11x17) approved copy of plans, digital copies of the \*.PDF plans and the ACAD files.

## Plat (Refer to Checklist for Plats in Supplemental Specifications)

## **For County Engineer Use only**

Yes  No  N/A On public school sites, please notify Design Department and Operations Department that proposed school will be going in.

Yes  No  N/A Have County Sanitary Engineer review plans (courtesy review). This will insure that sampling pits go in where required, and they know to inspect them.

### Comments:

### **Comment Disclaimer:**

**The County Engineer Reserves The Right To Make Any Additional Comments At Any Time Up To The Actual Approval Of This Project. See the Delaware County Standards for other items not addressed on this list.**

Approved  Disapproved

Reviewed by:

Date: \_\_\_\_\_

Write letter to: