

**Delaware County Engineer's Office (DCEO)**  
**Ditch Setback**  
**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 Proper number of plan sets (4 sets of full size and 1 set of half-size Plans)
- Yes  No  N/A A CD or DVD containing PDFs of the plans, storm reports, etc shall also be provided with the plans for all submittals
- Yes  No  N/A Completed Ditch Setback plan review checklist provided
- Yes  No  N/A Plan review fees (Typically no fees are required, only the submittal of the submission checklist). See [http://www.co.delaware.oh.us/engineer/Review/Plan\\_Review\\_fee\\_schedule\\_cover\\_page.pdf](http://www.co.delaware.oh.us/engineer/Review/Plan_Review_fee_schedule_cover_page.pdf) for copy of fee submission checklist
- Yes  No  N/A Existing Topographic Survey – Can be incorporated into the Plan Sheet(s)
- Yes  No  N/A Drainage and/or R/W Conveyance Instruments, Metes and Bounds Descriptions, and associated Exhibits provided (If applicable)?
- Yes  No  N/A Drainage and other supporting calculations (Typically drive pipe calculations based on design year storm - If applicable)
- Yes  No  N/A Copies of approved environmental documents, Corps of Engineers permits, and other permits submitted
- Yes  No  N/A Final Engineer's Estimate (for publicly inspected/maintained items only – See Art. IX and Supplemental Specifications for guidance regarding how to format the estimate)

**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**

- Yes  No  N/A Name of Subdivision, Road Name and Road Number
- 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 Del-Co Water (if applicable)

- Yes  No  N/A Applicable Delaware County Standard Drawings referenced by Drawing Number. City of Columbus and ODOT standard drawings may be referenced on a project-by-project basis.
- Yes  No  N/A Applicable Delaware County Supplemental Specifications referenced by number. City of Columbus and ODOT supplemental specifications may be referenced on a project-by-project basis.
- 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 Index of Sheets
- Yes  No  N/A Benchmark list (referenced to USGS datum), Elevations, Designations and Locations
- Yes  No  N/A Owner/Developer's Name, Address, Telephone and Fax Numbers
- Yes  No  N/A Utility Owner(s) Name, Address and Telephone and Fax Numbers
- 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 Stamp and Signature of the Design Engineer licensed in the State of Ohio
- Yes  No  N/A Site Data including Total Area and Total Impervious Area
- Yes  No  N/A Change Order (revisions) table
- Yes  No  N/A Variance Table

### General

- Yes  No  N/A Existing drainage structures need modified or replaced as determined by County Engineer (Art. IV, Section 403 G)
- Yes  No  N/A Show proof of adequate stopping sight distance (SSD) for all proposed driveways per ODOT Location and Design (L&D) Manual, Volume 1, current edition.
- 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 SSD diagram?
- Yes  No  N/A Show the Clear Zone Setback line for projects located on County and Township Roads according to ODOT L&D Manual, Volume 1, current edition.
- Yes  No  N/A Indicated total project acreage disturbed
- Yes  No  N/A A DESC permit is required before final approval (See Article XII)
- Yes  No  N/A Reference provided to DCEO Standard Drawing DCED-R2130 – Required on Title Sheet.
- Yes  No  N/A Scales of Plan, Profile and Cross-Section Views comply with Article IV, Section 403?
- Yes  No  N/A General Notes (See Supplemental Specifications for notes)

- Yes  No  N/A All required environmental documents, Army Corps permits and ODNR permits submitted before final plan approval (Article IV, Section 401 A).
- Yes  No  N/A If final plan resubmittal, written response included that addresses previous comments and identifies additions/deletions made to plans since previous submittal (Article IV, Section 401 A).

### Plan View

- Yes  No  N/A Existing Pavement (dashed lines)
- Yes  No  N/A Existing And Proposed Right-Of-Way (R/W). See Supplemental Specifications for proposed R/W widths.
- Yes  No  N/A Existing and Proposed Utilities (Surface and Subsurface), including applicable easements shown?
- Yes  No  N/A Utility relocation in compliance with County Engineer's Utilities Policy for all utilities (if applicable – site specific)? Additional utility easements may be required.
- Yes  No  N/A Have drainage easements for the ditch setback been addressed?
- Yes  No  N/A Existing and Proposed Surface and Subsurface Drainage Features (Drainage ways, Tiles, Culverts, Etc.)
- Yes  No  N/A Benchmark Location, Elevation, and Description (Specify Datum)
- Yes  No  N/A Any part of site within the 100 yr floodplain? Indicate on plans.
- 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 Subdivision and/or Lot Boundaries
- Yes  No  N/A Other Physical Objects (Trees, Fences, Signs, Guardrail, Mailbox Posts, Existing Property Corner Monuments)
- Yes  No  N/A Trees or Landscape Features in R/W? (Not acceptable)
- Yes  No  N/A Erosion and Sedimentation Control Devices
- Yes  No  N/A Show location of first structure downstream
- Yes  No  N/A Is the minimum ditch gradient 0.4% preferred (0.24% minimum)?
- Yes  No  N/A North Arrow and Scale
- Yes  No  N/A Size, Slope, Length, and Type of Proposed and Existing Culverts [maybe done with profiles]
- 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 Existing and/or Proposed Driveway Locations shown?
- Yes  No  N/A All proposed drive pipes shall be installed with the ditch and shoulder improvements.
- Yes  No  N/A Typical Pavement Section (within R/W) provided? See Table 801 for required pavement buildup.
- Yes  No  N/A Driveway width (within R/W) compliant with Table 802?
- Yes  No  N/A Drive profile per Art. VIII, Section 802 A?
- Yes  No  N/A Spot elevations (minimum of 2, 3 preferred) for area of the proposed driveway radius.
- Yes  No  N/A Label Adjacent Property Names, Lot Numbers and Road Names
- Yes  No  N/A Ditch Direction of Flow and Slope shown?

### Profile

- Yes  No  N/A Elevation of Edge of Pavement at 50-foot (min.) intervals
- Yes  No  N/A Existing and Proposed Ditch Flowline Elevations at 50-foot (min.) intervals

- Yes  No  N/A Proof of an Adequate Storm Outlet shown?  
 Yes  No  N/A Show flowline elevation of first structure downstream  
 Yes  No  N/A Existing Ground Elevation at Proposed Ditch Flowline shown?  
 Yes  No  N/A Any Existing and/or Proposed Surface and Subsurface Drainage Structures shown?  
 Yes  No  N/A Proposed Tile Must Be Shown To a Point of an Adequate Outlet)  
 Yes  No  N/A Erosion and Sedimentation Control Devices shown?

**Cross-Sections**

- Yes  No  N/A Edge of Pavement shown?  
 Yes  No  N/A Right-Of-Way (Existing and Proposed) shown?  
 Yes  No  N/A Cross-section locations, elevations, etc. provided per Art. IV, Section 403 B., 4?  
 Yes  No  N/A Existing and proposed ground elevations shown (pictorially) and complies with existing conditions?  
 Yes  No  N/A Proper scale used for cross section (Art. IV)?  
 Yes  No  N/A No more than four cross sections per plan sheet.  
 Yes  No  N/A Is the minimum ditch gradient 0.4% preferred (0.24% minimum)?  
 Yes  No  N/A Foreslope rate (4:1 max.), backslope rate (3:1 max.), and ditch bottom width meet Delaware County requirements (See Standard Drawing DCED-R2130)? A 4:1 maximum backslope is desirable in lawn areas  
 Yes  No  N/A Ditch flowline elevations provided? (Art. IV)  
 Yes  No  N/A Existing and Proposed Utilities (Surface and Subsurface)  
 Yes  No  N/A Existing and/or Proposed Surface and Subsurface Drainage Structures

**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 General Notes (See Supplemental Specifications for notes)  
 Yes  No  N/A Erosion Control Standard Details

**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)

**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.**

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**For County Engineer Use only**

Yes  No  N/A    Notify Permit Department for Fees and Initial Title Sheet Mylar before signing

Yes  No  N/A    Have Storm Water Department DESC permit approval and initial Title Sheet Mylar before signing

Comments:

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Approved  Disapproved

Reviewed by: \_\_\_\_\_ Date: \_\_\_\_\_

Write letter to: \_\_\_\_\_