

# BOARD OF LAPEER COUNTY ROAD COMMISSIONERS

820 Davis Lake Road, Lapeer, Michigan 48446

Phone: 810.664.6272 / Fax 810.664.0404

## **Check List for Plan Approval - Plan Requirements**

- Location Map (1" : 2,000' max), locating references to Township and Section
- Plan Date / Revision Dates
- Engineer's Address, Telephone and Email
- Proprietor's Address, Telephone and Email
- Type of Development (Residential, Commercial or Industrial)
- Permanent Benchmark Locations, Elevations and Descriptions
- Title Block
- North Arrow and Scale (Each Sheet)
- Engineer / Surveyor Seal
- Miss Dig Notes
- Place the following Note(s) on the project plans, as required:
  - Contractor shall provide 48-hour notice to the Lapeer County Road Commission prior to commencing construction work within the Road Right of Way.
  - Concrete forms shall be inspected by the Lapeer County Road Commission prior to concrete pour. Contact LCRC at 810-441-3870 to schedule inspection at least 24 hours prior to concrete pour. Do not pour concrete until approval is received.
  - Prior to commencement of any paving operation, the grade must be reviewed and approved by LCRC. Contact LCRC for at 810-441-3870 to schedule inspection at least 24 hours prior to paving operation. Do not place asphalt until approval is received.
  - After all paving, seeding, sodding, clean-up, etc. has taken place, there shall be a Final Inspection by the LCRC. The LCRC will provide a punch list of items that are not complete, are deficient or are in need of correcting. All punch list items will need to be addressed and inspected again prior to acceptance.
- Topographical Survey, including all features a minimum of 100 feet beyond the property lines
  - Including, but not limited to, Pavement (concrete / asphalt), shoulder limits, ditches, curb and gutter, trees, landscaping, utility poles, telephone pedestals, manholes, underground utilities, mailboxes, etc.
- All governing conditions such as Railroads, Cemeteries, Parks, Easements, Structures, etc.
- Contours – 2' Intervals (5' Intervals are acceptable if slopes are greater than 10%)
- Property Lines clearly identified and property legal description
- Proposed Rights of Way (50' for Primary Road or Heavy Traffic > 1,500 ADT Future)
- Area of Development in Acres
- If Development is in phases, outline the phase being submitted for approval
- Limits of Watershed Areas, Wetlands, Floodplains, Floodways, and Rivers
- Existing Drainage Courses, Structure, including culverts, manholes, catch basins, etc.
- Overall Topographic Map delineating existing and proposed drainage districts with drainage arrows
- Typical Cross-Section for Roads and Approaches
- Layout Sheet – Paving and Drainage Plan (1" : 100' max)
- Layout Plans in Detail with Plan and Profile Views (1" : 40' H and 1" : 5' V max)

- Layout Sheet – Sanitary Sewer and Water main Layout (1" : 100' H and 1" : 10' V max)
  - 10 feet horizontal separation
  - 18-inch vertical separation
  - 4' below centerline of road
- Approach Detail(s) (1" : 20' max), Shall include existing and proposed ditch grades, ditch centerlines, drainage arrows, culvert invert elevations (18" diameter minimum) and end sections, and proposed pavement spot elevations
  - Minimum ditch grade is 0.4%
  - Approach allowable angle 75% to 105%
  - Approaches shall be placed directly across from or offset 77' from other drives
  - Approach shall be located entirely on Applicant's property
  - Cub shall be no closer than 3' to road edge when
- Sight Distance at County Road Approaches
- Passing Flare / Traffic Study, if required
- Construction Details
  - Compaction Details, including required percent of maximum unit weight per material
- SESC Details and Notes
  - Ditch 2% to 4% - Place Sodding or Mulch Blanket
  - Ditch >4% - Place Rip Rap, Stone Check Dams
- Only one (1) construction entrance shall be allowed
  - Construction Entrance shall have 1:3 stone or truck mat
- Plan and Profile Elevations and Grades
- Treatment at connection to existing County Roads (i.e. Butt Joint, Sawcut or Milling note if County Road is paved)
- Guard Rail details, if necessary
- Temporary and Permanent Signing Plan (Must be included in Plan Set, do not attach letter size details)
- Driveway Culverts sized hydraulically and shown in a table on the plans set (drive table)
- Retention / Detention Basin calculations along with Storm Sewer calculations, if necessary (See standards)
- Transmittal Letter indicating changes from previous reviews (indicate in submit line submittal number, i.e. "Second Submittal", etc.)

**Additional Plan Requirements for Subdivision / Private Road**

- Subdivision Name (If Applicable) and Street Names (Labeled Proposed Public / Private)
- Adjacent and Adjoining Streets and Properties to include homes, commercial and /or industrial buildings within 200 feet of the proposed Road
- Lineal feet of Proposed Roads
- Lot Layout
- Road Alignment (Survey Data) – Vertical and Horizontal
  - Vertical Curves including Lengths, Elevations and K Values
- Easements
- Typical permanent signing plan for development