



**CITY OF GROSSE POINTE WOODS
ENGINEERING PLAN REVIEW
CHECKLIST**

PROJECT: _____ AEW #: _____

SITE PLAN #: _____

NO. OF ACRES: _____

NO. OF LOTS: _____ REVIEW FEE: _____

REGARDLESS OF ENGINEERING PLAN REVIEW STATUS, THE OWNER IS RESPONSIBLE FOR THE FOLLOWING GENERAL REQUIREMENTS:

1. All construction must conform with current City specifications and any other agency having jurisdiction, unless written approval is granted to the contrary.
2. Review fees must be paid with initial submission of plans.
3. All City, County and State inspection and permit fees must be paid prior to construction.
4. Pre-construction meeting must be held prior to construction unless written permission from the City is granted to the contrary.
5. Easements must be prepared prior to engineering approval and as-builts completed prior to acceptance of any utility by the City.

NOTE:

This Engineering Plan Review Checklist is not intended to be a complete or comprehensive list of review items. Additional requirements or exceptions will be evaluated on a case by case basis.

SANITARY SEWER REQUIREMENTS

- _____ In conformance with Master Plan.
- _____ Service area map and volume computations provided permit application.
- _____ Quantity and Location list provided on cover sheet for Permit.
- _____ Proper Spacing/Location of Manholes. (400' MH to MH)
Size: 4 Ft. Min.
 5 Ft. Min. /Drop Connections
- _____ Size, Slope, Type and Class of pipe in conformance with City requirements. (8/10's, 0.1 Ft., drops).
- _____ All conflicts shown in plan and profile with elevations.
- _____ City Detail sheet included with plan.
- _____ Outlet is available and has sufficient capacity?
- _____ Sufficient depth for future extension within service area? Sufficient depth within site?
- _____ Sanitary sewer easements (on-site, off-site).
- _____ Profile.
- _____ Interior drop connection only (over 1.5' drop).
- _____ 6" leads, location, materials, slope, clear storm sewer?
- _____ Compacted sand backfill under paved areas.
- _____ Inspection manholes for industrial.
- _____ Dimensions.
- _____ Sump for testing infiltration (1' deep) at first MH upstream of existing sanitary.

STORM SEWER REQUIREMENTS

- _____ Service area map and hydraulic computations provided.
- _____ Retention area provided with proper volume calculations. (2" over site).
- _____ Proper Spacing/Location of Manholes with dimensions (350' max.).
- _____ Stubs or Catch Basins provided for maintenance of upstream drainage.
- _____ Size , slope, type and Class of pipe in conformance with City requirements.
- _____ All conflicts shown in plan and profile with elevations.
- _____ Current City Detail sheet included in plan.
- _____ Outlet is available and has sufficient capacity.
- _____ Sufficient depth for extension within service area.
- _____ Storm sewer easements. (On-site, Off-site). Only need to maintain off-site drainage outlets.
- _____ Bedding, compaction and backfill notes.
- _____ All catch basins require 2' sumps.
- _____ Minimum catch basin size is 2' minimum (yard basins only) 4' minimum all others.
- _____ Premium joint pipe to be used on side lot lines from drainage structure to drainage structure.
- _____ Minimum storm sewer size is 8".
- _____ Sump pump leads and roof drains to drainage structures.
- _____ At least 1 rear yard drainage structure must be adjacent to each lot.
- _____ Depth: 4 Ft. (min.) from proposed ground to invert.
- _____ Provide profiles.
- _____ Show hydraulic gradient.
- _____ Drain Commission requirements.
- _____ Edge drain at catch basins.
 Edge drain around entire perimeter of New Roads.

WATER MAIN REQUIREMENTS

- _____ In conformance with Master Plan.
- _____ Quantity and Location list provided on Cover Sheet for Permit.
- _____ Proper Spacing/Location of gate valves (800') and hydrants (500') air release valves and blow-offs.
- _____ Size and class of pipe in conformance with City requirements.
- _____ Current City Detail sheet included in plan.
- _____ System looped properly internally or with existing water main.
- _____ Provide for future loops or extensions.
- _____ Water main easements. (On-site, Off-site).
- _____ Hydrant location approved by Fire Chief.
- _____ Finish grades for gatewells and fire hydrants.
- _____ Profile for 16" and larger.
- _____ Sizes: 6" for hydrant leads less than 60'
 8" for hydrant leads greater than 60'
 8" in residential (min.)
 12" in industrial (min.)
- _____ Trust blocks, bends.
- _____ Depth = 5.5' of cover.
- _____ Show all utility crossings with elevations and clearances.
- _____ Compacted sand backfill under paved areas.
- _____ Connection to existing mains with tapping sleeve valve in well.
- _____ Check location within existing and proposed R.O.W.

PAVING AND GRADING

- _____ Is **off-site** drainage picked up. (Piped and Surface).
- _____ Building drainage provided for.
- _____ Proper grading slopes (asphalt – 1%, concrete - .5% swales – 1% minimum. Rear yard surface drainage 300 ft. maximum). (5% - max. for paved areas).
- _____ Typical Section shown. (Grading and Pavement).
- _____ Fence, wall or screening required. Weep holes for drainage.
- _____ Accelerate-Decelerate or by-pass lanes required.
- _____ Sidewalks required, with elevations.
- _____ Easement required.
- _____ Easement required for grading. (On-site, Off-site).
- _____ Easement required for access. (On-site, Off-site).
- _____ Large differences in proposed grades and off-site grades may require a retaining wall design.
- _____ Mass grading must be completed prior to construction of onsite utilities (if large cuts and fills are expected).
- _____ Earth removal permit for lake construction.
- _____ Cross sections around perimeter of site.
- _____ Check trash dumpster details
8" wall, poured deco. concrete
- _____ Man-door protection posts.
- _____ Building grade comparison to adjacent buildings or property.
- _____ 7' wide sidewalks in front of handicap spaces to allow for 2' vehicle overhang.
- _____ Means of Restoration provided on plans.