# Village of



# Mamaroneck

OFFICE OF ANTHONY R. CARR, PE, CFM VILLAGE ENGINEER Village Municipal Building
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## **ENGINEERING PLAN REVIEW CHECKLIST**

Project Name:	 	 
Applicant Name:		
Date:		

Submission of this completed form is a part of the Village Engineer Review. All items should be 'checked off' prior to submittal to ensure a complete submittal. If the applicant deems an item to be "Not Applicable" to the proposed development, it shall be marked as "NA".

Please carefully review this checklist, and make sure you accurately fill it out. If this checklist is not accurately filled-out, you will be notified within five (5) business days that your submittal is incomplete. If the checklist is inaccurately submitted, the Village Engineer will not begin the technical review of the engineering drawings until the plans are resubmitted to include the information contained within this checklist. Everything herein is in correlation to, support of, and in compliance with the Code of the Village of Mamaroneck, and the principles and practices of Civil Engineering.

The Civil Engineering Plan Review Checklist is a list of items that will be used by the Village Engineer when reviewing engineering plan submittals. The items have been categorized per pertinent recommended (not required) plan sheet on the next page and in the checklist. The Applicant may choose to assign a different nomenclature for the civil engineering drawings. Please note, since every proposed project varies in size and scope, not all suggested engineering plans, content, etc. may be applicable and/or required. Depending on the nature of the project, the information listed under each recommended drawing title may be condensed or incorporated into a single plan (e.g. "Site Plan", "Stormwater Management Plan", etc.), or several plans similar to the drawings listed in this document. However, the content for the engineering drawing(s) shall include the pertinent information (e.g. certified survey) from the checklist. The Village Engineer reserves the right to waive or require any checklist item.

### **Instructions:**

- 1. Use the attached list to verify the completeness of the engineering plans being submitted.
- 2. Check the box next to each item that has been provided on the plans.
- 3. If an item or section is not applicable to the given project, write "N/A" in the "Not Applicable" box.
- 4. Add notes next to any items where clarification to the Village Engineer is needed.
- 5. Attach the completed checklist with the engineering plans at time of first submittal only.
- Verify the pertinent project items under each drawing section are met. The Village Engineer reserves the right to reject any set of plans that does not meet these minimum submittal requirements.

7. Sign and complete contact information below.

### Recommended (i.e. Not Required) Order of Civil Drawings

- Cover Sheet
- 2. General Notes and Legend
- 3. Existing Conditions Map
- 4. Demolition Plan
- 5. Layout and Materials Plan
- 6. Grading and Drainage Plan
- 7. Utilities Plan
- 8. Erosion and Sediment Control Plan
- 9. Landscaping Plan (separate review by Planning Board and/or Landscaping Consultant)
- 10. Photometric Plan (separate review by Planning Board)
- 11. Maintenance and Protection of Traffic (MPT) Plan (separate review based on government agency)
- 12. Road and/or Utilities Profiles
- 13. Construction Details

Please note, this checklist contains information intended to assist the design engineer in preparation of civil drawings for review by the Village Engineer. The "Civil Engineering Plan Review Checklist" is not intended to be a definitive list of all information or a list of design requirements.

The information listed in the checklist below is the basic information required for most civil engineering plans. Additional information may be required on a case by case basis. Similarly, depending on project scope and type, less information may be required. The Village Engineer, Village Planner, Building Inspector and Fire Department staff are happy to meet with designers in the early design phase to review permitting requirements, and clarify any site development concerns. Please contact the Building Department/Office of the Village Engineer at (914) 777-7731 if you are interested in scheduling a pre-design meeting. The Office of the Village Engineer can also be reached via email at: <a href="mailto:engineer@vomny.org">engineer@vomny.org</a> with questions, comments, etc.

The Village of Mamaroneck Village Code, sample SWPPP templates (word files), engineering standards, submittal checklists, forms, construction details, FEMA information, sample civil engineering plans (for reference only), "As-Built" sample drawings and other useful engineering information can be found on the Village Engineer webpage at:

http://www.village.mamaroneck.ny.us/Pages/MamaroneckNY engineer/index

"I, the undersigned Design Professional for this project, hereby certify that I have reviewed the
Engineering Plan Review Checklist, and that the information provided herein is correct and
complete to the best of my knowledge."

Signature:	Date:
Printed Name:	Phone:
Email:	

					Official Use Only		
Not Applicable	pəpnjouj	Item Description	Notes	Missing	Incomplete	Not Required	
		A. ADMINISTRATIVE ITEMS					
		Completed Civil Engineering Plan Review Checklist					
		Two Hardcopies and combined electronic (PDF) file of Engineering Plans Initial and Final Submittal (PDF files of revised engineering drawings are acceptable until drawing(s) are approved by the Village Engineer). Village Engineer email: <a href="mailto:engineer@vomny.org">engineer@vomny.org</a>					
		Markups/Annotated Review Comments from Previous Submittals, if subsequent					
		Two copies of any Study or Report Completed for the Project					
		Floodplain Development Permit, if applicable					
		Utility Company (e.g. WJWW) Approval, if applicable					
		Adequate Water Supply and Sanitary Sewer Capacity "Will Serve" Letters from WJWW and WCDEF (Village to provide letter for connection to sanitary sewer mains). This is required for all new/proposed development (excluding re-use of existing service connections). Applicant will be required to provide WCDEF with proposed sanitary sewer anticipated average daily design flow. Applicant will be required to provide anticipated water demand (e.g. fixture counts, fire suppression, irrigation, etc.) to WJWW.	Refer to Village Engineer webpage for sample WCDEF and WJWW "Will Serve" letters				
		WCDEF, WCDOH, WCDPW and other County approval, if applicable					
		NYSDEC, NYSDOT and/or other State Approval, if applicable					
		USACE, USEPA and/or other Federal Approval, if applicable					
		Traffic Impact Study (TIS), if applicable					
		Stormwater Pollution Prevention Plan (SWPPP) in accordance with Chapter 294 "Stormwater Management and Erosion and Sediment Control, if applicable. SWPPP required for proposed land disturbance of 1,000 square feet (SF) or greater. Stormwater Management and Erosion and Sediment Control Plan required for proposed land disturbances between 200 SF - 1,000 SF (SWPPP not required for land disturbance below 1,000 SF)	Refer to SWPPP Checklist for additional information				
		Stormwater Management and Erosion and Sediment Control Permit (coming soon), if applicable (for proposed land disturbances greater than 200 SF and less than 1,000 SF).	Refer to Village Engineer webpage				
		Engineering Report analyzing capacity of existing Village sanitary sewer to accommodate the proposed average daily sanitary sewer design flow (with appropriate peak factors)					
		Structural engineering calculations for proposed retaining walls	Height > 4 feet				
	_	Additional approvals and permits must be obtained from the applicable outside agencies prior to engineering approval for issuance of a Village of Mamaroneck Building Permit					

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Not Applicable	Included	Item Description	Notes	Missing	Incomplete	Not Required	
		B. GENERAL FOR ALL DRAWING SHEETS					
		Sheet Size = 24" x 36", each sheet neatly bound					
		Title Block with Project Name and Sheet Description					
		Revision Block - Filled Out as Required					
		North Arrow					
		Vertical and Horizontal Scale Listed and Accurate					
		Benchmarks Listed and Described					
		Include note indicating what datum is used for the plan set (i.e. NGVD 1929, NAVD 1988, etc.)					
		Legend of All Drawing Symbols and Line Types Used					
		Engineer's other Design Professional Seal, Signature and Date per New York State Education Law					
		Responsibility Note Required on All Sheets except site plan and standard details:  "ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN PROFESSIONAL. THE VILLAGE OF MAMARONECK, NY, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN."					
		Provide Site Location Map and Key Map (for Large Scale Projects) Showing Sheet Locations					
		Clear Drafting with Proper Line Weights for Ease of Reading					
		No Overlapping Text					
		Drafting at Scale of No Less han 1"=30' to Obtain Ease of Reading and Scanning (this excludes overall/special plans)					
		Section, Block & Lot and/or ownership info shown for all lots					
		C. COVER SHEET (AS APPLICABLE)					
		Project Name					
		Official Project Address Assigned by Village Tax Assessment Map					
		Revision Table					
		Civil Engineer (or other Design Professional) of Record Contact Information (Name, Address, Phone Number, email address)					
		Owner/Agent Contact Information (Name, Address, Phone Number, email address - email when available)					
		Sheet Index - List ALL sheets included in plan set					

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Not Applicable	Included	Item Description	Notes	Missing	Incomplete	Not Required
		Location Map with North Arrow				
		D. EXISTING CONDITIONS MAP (SURVEY) ***SIGNED AND SEALED PLS COPY TO ACCOMPANY EACH SUBMITTAL***				
		Property boundary with metes and bounds (northing & easting)				
		Existing easements (e.g. access, utilities, etc.)				
		Existing topography (i.e. one and/or two foot contours and spot grades indicating low and high points). Vertical Datum shall be NAVD 1988 or NGVD 1929. <b>GIS topography is NOT acceptable.</b>				
		Existing utilities (e.g. storm and sanitary sewer, water, gas, electric, etc.)				
		Existing structures and above ground features (e.g. sidewalks, fences, curb, edge of pavement, retaining walls, pavement striping, symbols, etc.)				
		Existing roadway and driveways adjacent to the site				
		Location of existing drainage courses, FEMA floodplain(s), lakes and streams, and wetlands with elevations				
		Location, name and size of existing trees/shrubs. Where plants occur in mass, the canopy drip line and a general description of plant types.				
		E. LAYOUT (DIMENSIONAL) AND MATERIALS PLAN				
		For proposed streets, a site specific geotechnical evaluation & pavement design submitted, as required by Village Engineer				
		Typical Pavement Section details shown (fire lane, parking areas, streets, subgrade, etc.)				
		For proposed streets, centerline stationing at every 100', PC's, PT's, and curve data labeled				
		Intersection, driveway and island curb radii labeled				
		All sidewalks and sidewalk curb ramps shown, labeled and dimensioned				
		HMA and/or PCC Pavement design (when applicable)				
		Dimensions, curve radii and centerlines of existing and proposed access points, roads and road rights-of-way or access easements				
		Cross section details (as required) of proposed roads, driveways, parking lots, sidewalks and non-motorized paths illustrating materials and thickness				
		Dimensions of parking spaces, islands, circulation aisles and loading zones				

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Not Applicable	pepnjoul	Item Description	Notes	Missing	Incomplete	Not Required	
		Location of existing and proposed sidewalks/pathways within the site or Right-of-Way					
		Proposed buildings (include square footage and number of stories), structures, etc.					
		Proposed parking area isle width and curb radii					
		Proposed parking stall type, dimensions & striping					
		Handicap accessibility (spaces, sidewalk curb ramps, accessible parking, signage, symbols, etc.)					
		Proposed curb cuts (dimensions)					
		Proposed commercial loading spaces					
		Proposed building, parking and landscaping setbacks (where applicable)					
		Additionally proposed site features (where applicable) (e.g. landscaping)					
		Designed Fire Lane and Fire Department Access (where applicable)					
		Proposed traffic sign locations, table and pavement symbols, markings, etc.					
		F. GRADING AND DRAINAGE PLAN					
		Existing and proposed finished grades (i.e. one and two foot contours and spot grades indicating high and low points)					
		Proposed building finished floor elevations (FFE's) (with spot grades around building perimeter, door sills, etc.)					
		Proposed retaining wall top and bottom elevations					
		Proposed curb top and bottom elevations					
		Existing utilities (sanitary sewer, sewer force main, water, OH/UG electrical, telephone, traffic, etc.)					
		Connection to existing storm drain system (if applicable) with rim & inverts of applicable storm drain structures					
		Proposed storm drain system (all structures labeled with structure number, rim, invert)					
		Proposed storm drain system (all pipe labeled with length, diameter, material & slope)					
	_	Proposed Stormwater Management Facilities including required post-construction controls (labeled with location and type of facility, material, length, number of units, rim, inverts, etc.)					
		Location of Deep Test (Test Pits) and Percolation Tests with Soil Classification (required for all stormwater infiltration practices)  ***Village Engineer may require to be present during testing***					

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Not Applicable	Included	Item Description	Notes	Missing	Incomplete	Not Required
		Rip rap (sized) for flared ends, headwalls, etc.; grouted rip rap (as required by Village Engineer) for outfall into existing Village ditches/channels				
		Existing and proposed ditches; indicate material and depict flow centerline				
		G. UTILITIES PLAN				
		Existing and proposed elevations (to indicate utilities cover)				
		Existing utilities (sanitary sewer, sewer force main, water, OH/UG electrical, telephone, traffic, etc.) on-site and in Right-of-Way				
		Proposed storm drain system (all structures labeled with structure number, rim, invert)				
		Proposed storm drain system (all pipe labeled with length, diameter, material & slope)				
		Proposed Stormwater Management Facilities including required post-construction controls (labeled with location and type of facility, material, length, number of units, rim, inverts, etc.)				
		Proposed sanitary sewer (gravity) linear feet, diameter, material, slope; Manhole rims & inverts proposed and existing (where applicable). Maximum manhole spacing = 300 feet.				
		Proposed sanitary sewer clean outs at property line and building(s) with inverts				
		Proposed storm/sanitary sewer force main (if applicable)				
		Proposed storm/sanitary pump station location; invert in and out, type and gallons per minute (if applicable).				
		Proposed connection points with size and type of material within 5 feet of proposed structures				
		Proposed water line; linear feet, diameter, and material				
		Proposed water meter size and backflow meter location				
		Fire hydrants; existing and proposed				
		Existing and/or proposed fire suppression service				
		Proposed and existing sanitary sewer and water line easements				
		Proposed gas service line size and material, or indicate not required				

				Official Use Only		
Not Applicable	Included	Item Description	Notes	Missing	Incomplete	Not Required
		Provide minimum horizontal separation of 10 feet between proposed water and sewer mains; or 18" minimum vertical separation if laid on undisturbed earth (refer to Ten State Standards, as amended or revised and WCDOH regulations)				
		Canal crossings along with jack and bore installations to be approved on a case-by-case basis; Directional borings to be approved on case by-case basis.				
		H. EROSION AND SEDIMENT CONTROL PLAN				
		Existing and proposed topography (temporary and final) clearly shown/labeled				
		Existing and proposed storm sewer/inlets shown				
		Erosion & Sediment Control notes shown on plans				
		E&S protection (temporary and permanent) measures are shown				
		A schedule of when E&S protection measures will be implemented and maintained during construction is shown on the plans				
		Protected stockpile area shown and labeled				
		E&S control (temporary and permanent, vegetative and non-vegetative) measures shown on the plans				
		Wetlands have been delineated on the plan or a statement that no wetlands exist on the site				
		FEMA BFE 100-year floodplain elevation is shown on the plan or a statement that it does not exist on this site				
		Limits of proposed earth/land disturbance are clearly shown on the plan with a distinct line type; proposed land disturbance is noted on plans in square feet				
		Slopes disturbed of 4:1 and steeper have erosion control blanket (ECB) proposed				
		E&S details provided shall be in accordance with NYSDEC "Blue Book" last revised August 2005, or as amended				
		Areas to be sodded or seeded shown and specified with permanent perennial vegetation				
		Protection of existing and proposed inlets & outlets, existing waterbodies, adjacent properties and other areas as required by the Village Engineer, NYSDEC, etc.				

					Official Use Only			
Not Applicable	pepnicul	Item Description	Notes	Missing	Incomplete	Not Required		
		I. MAINTENANCE & PROTECTION OF TRAFFIC (MPT) PLAN						
		Required for all work affecting vehicular and pedestrian traffic within the Right-of-Way (for Village roads, MPT Plan shall be approved by Village Engineer. MPT Plans for County or State roads, shall be approved by the government agency having jurisdiction.)						
		Traffic flow is to be maintained at all times during the progress of work						
		Adequate signs, barricades, flagpersons, lights and other control devices shall be provided in accordance with the provisions of the NYSDOT Manual of Uniform Traffic Control Devices (MUTCD), in conjunction with NYSDOT Standard Specs, Section 619, as amended or revised.						
		No lanes shall be closed without prior approval						
		Applicant shall designate a representative for implementing the MPT Plan						
		J. STORM SEWER PROFILE SHEETS (AS REQUIRED BY VILLAGE ENGINEER FOR COMMERCIAL/MULTI-FAMILY DEVELOPMENT AND SUBDIVISIONS)						
		Existing and proposed ground line at centerline of pipe shown and labeled correctly						
		Show all hydraulic data including pipe flow, pipe capacity, hydraulic slope, velocity, velocity head, and partial flow data if under partial flow conditions (velocity and flow depth)						
		Label station and flowline elevation information for all structures, crossings, laterals, etc.						
		Label flowlines at every 50 foot station						
		Indicate length, material, slope and size of all storm pipes						
		Show and label 25-year HGL, label HGL elevations at all junctions (based on storm sewer hydraulic calculations)						
		All utility crossings and parallel sewer lines shown in profile						
		K. SANITARY SEWER PROFILE SHEETS (AS REQUIRED BY VILLAGE ENGINEER FOR COMMERCIAL/ MULTI-FAMILY DEVELOPMENT AND SUBDIVISIONS)						
		Profile shown for all sanitary sewer mains, or where a potential conflict may arise						
		Existing and proposed ground line at centerline of pipe shown and labeled						

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Not Applicable	Included	Item Description	Notes	Missing	Incomplete	Not Required		
		Label station and flowline elevation information for all manholes, cleanouts, crossings, laterals						
		Label flowlines at every 50 foot station						
		Manhole inflow and outflow elevations to be designed with a minimum of 0.1' drop; max. manhole spacing is 300 feet						
		Indicate the type and diameter for all manholes						
		Indicate length, type/class, slope and size of all sanitary sewer pipe between manholes; external or internal drop connection required for pipe invert elevation difference of 2 feet or greater						
		All utility crossings and parallel storm lines shown in profile						
		Indicate length, type and size of encasement as needed						
		L. WATER MAIN PROFILE SHEETS (AS REQUIRED BY VILLAGE ENGINEER FOR COMMERCIAL/MULTI-FAMILY DEVELOPMENT AND SUBDIVISIONS)						
		Profile all water mains 6" and larger, or where a potential conflict may arise						
		Existing and proposed ground line at centerline of pipe shown and labeled correctly						
		Label station and flowline elevations at 100' intervals, and for all						
		Indicate length, type/class, slope and size of all lines						
		All utility crossings and parallel sewer/storm lines shown in profile						
		Indicate length, type and size of encasement as needed						
		M. ROAD PROFILE SHEETS						
		Existing ground line for left, right, and center of right-of-way shown; Property and Right-of-Way lines; CL of intersecting roads						
		Proposed top of curb line shown for all public streets; proposed limit of sidewalk and edge of pavement labeled						
		Show right and left top of curbs at intersections where split grade occurs						
		Top of curb/pavement elevations labeled at every 50 foot stations						
		Vertical Curve stationing and elevations including PVC, PVI, PVT, crest/sag location, curve length, algebraic grade difference, and "K" values shown at a minimum						
		Street grades shown to the nearest 0.01'. Max and min grades per Village Code and NYSDOT/AASHTO guidelines						