

**PLANNING AND CODE ADMINISTRATION**

City of Gaithersburg · 31 South Summit Avenue · Gaithersburg, Maryland 20877 · Telephone: (301) 258-6330 · Fax: (301) 258-6336  
[plancode@gaithersburgmd.gov](mailto:plancode@gaithersburgmd.gov) · [www.gaithersburgmd.gov](http://www.gaithersburgmd.gov)

**RETAINING WALL  
(MODULAR BLOCK WALLS (3) THREE FEET AND TALLER)  
CHECKLIST**

**THIS CHECKLIST IS A GENERAL GUIDE FOR ITEMS THAT ARE TYPICALLY REQUIRED FOR AN APPLICATION. PLEASE CONTACT PUBLIC WORKS AT 301-258-6370 FOR FURTHER CLARIFICATION.**

The intent of this checklist is to guide the designer in producing a constructible plan and documents that will enable the user to purchase and install the improvements, fully achieving the proposed function and minimizing construction issues. A third party review and certification is required as part of the submission. Items denoted with an "\*" are minimum required as part of the Schematic Development Plan minimum requirements, otherwise all items are applicable at time of submission. In order to reduce delays in review time, the applicant shall make sure all items are complete as possible so that the plans will not be rejected at time of initial review.

**PLAN VIEW**

- |   |  |
|---|--|
| <input type="checkbox"/> Radius*  | <input type="checkbox"/> Soil Reinforcement Dimensions *   |
| <input type="checkbox"/> North Arrow*   | <input type="checkbox"/> Underdrain Pipe Dimensions  |
| <input type="checkbox"/> Scale*   | <input type="checkbox"/> Fence/railing/guardrail (as applicable)*                                      |
| <input type="checkbox"/> Wall No. (if multiple walls)*                                      | <input type="checkbox"/> Easement and Property Lines clearly shown*                                    |
| <input type="checkbox"/> Match Line*  | <input type="checkbox"/> Proposed and Existing Utilities*  |
| <input type="checkbox"/> Legend*  | <input type="checkbox"/> Footing outline shown*  |
| <input type="checkbox"/> Centerline with Stationing and Elevations*                         | <input type="checkbox"/> Modular Block Components labeled with details of product type and dimensions* |
| <input type="checkbox"/> Beginning and End of Retaining Wall with Stationing and Elevations | <input type="checkbox"/> Fill Slope Transition labels  |
| <input type="checkbox"/> Longitudinal Dimensions  | <input type="checkbox"/> Extents of Geogrid*   |

**PROFILE**

- |   |   |
|---|---|
| <input type="checkbox"/> Existing Ground Line   | <input type="checkbox"/> Underdrain Pipe locations and dimension between each pipe*               |
| <input type="checkbox"/> Scale  | <input type="checkbox"/> Wall No. (if multiple walls)*  |
| <input type="checkbox"/> Match Line   | <input type="checkbox"/> Fence/railing/guardrail (as applicable)*                                 |
| <input type="checkbox"/> Projected from Plan View in the same direction                                 | <input type="checkbox"/> Existing and Proposed Utility Crossings (including construction details) |
| <input type="checkbox"/> Longitudinal Dimensions  |   |
| <input type="checkbox"/> Elevations (Top of Wall, Bottom of Wall, Top of Footing and Bottom of Footing) |   |

**HORIZONTAL CURVE CHART**

- |                                     |   |
|-------------------------------------|---|
| <input type="checkbox"/> Stationing | <input type="checkbox"/> Structure Located on Curve |
| <input type="checkbox"/> Bearings   | <input type="checkbox"/> Curve Information          |

## **TYPICAL SECTION**

- |  |  |
|--|--|
| <input type="checkbox"/> Dimensions*                                   | <input type="checkbox"/> Backfill Material Label (type and material)   |
| <input type="checkbox"/> Elevations*                                   | <input type="checkbox"/> Geotextile Label (type, material)   |
| <input type="checkbox"/> Finished Grade*                               | <input type="checkbox"/> Landscaping Rock/Weed Barrier/Root Barrier Label*   |
| <input type="checkbox"/> Existing Ground Line*                         | <input type="checkbox"/> Modular Block Component   |
| <input type="checkbox"/> Top and Bottom of Wall*                       | <input type="checkbox"/> Line Styles/Patterning  |
| <input type="checkbox"/> Wall Batter                                   | <input type="checkbox"/> Capstone Label  |
| <input type="checkbox"/> Bench Bevel                                   | <input type="checkbox"/> Underdrain Pipes and slope to drain   |
| <input type="checkbox"/> Fill Slope Transition Detail                  | <input type="checkbox"/> Gravel For Drains Label (rock type, class dimensions)                                       |
| <input type="checkbox"/> Embedment Dimension                           | <input type="checkbox"/> Adjacent footings that may be impacted by wall failure*                                     |
| <input type="checkbox"/> Bottom Limits Slope (if drain system present) | <input type="checkbox"/> Steps Details (if applicable)   |
| <input type="checkbox"/> Fill Slope                                    | <input type="checkbox"/> Water Elevation (if applicable)   |
| <input type="checkbox"/> Typical Layer of Soil Reinforcement           | <input type="checkbox"/> Property, Easement or Right of Way Lines*   |
| <input type="checkbox"/> Bottom Limits of Excavation                   | <input type="checkbox"/> Zone of influence line at the section closest to the building shown to not impact the wall* |
| <input type="checkbox"/> Back Limits of Excavation/Bench               |  |

## **COMPUTATIONS**

- |  |  |
|--|--|
| <input type="checkbox"/> Include all accurate loads (including surcharge & hydrostatic load) | <input type="checkbox"/> Structural calculation, Geotechnical Reports and all supplemental documentation has been received and is consistent with what is proposed |
| <input type="checkbox"/> Compliance with Soil type (Geotechnical Report)                     |  |

## **GENERAL**

- Include the Factor of Safety (Sliding, Global Stability, Overturn) on the cover sheet.
- All materials (ex. drainage structures, reinforcement, fencing) spacing and design is compliant with City Code or most applicable regulation.
- Material types (Geotextile fabric, backfill material, strength of materials, type of stone) shown on details or profile sheets.
- Pedestrian fencing meets the City Code. Fences are needed for drops greater than 30", must be a minimum of 42" tall with openings less than 4" and withstand a lateral pressure of 200 lbs concentrated load per IBC.\*
- Vehicular guardrails can support impact as per Chapter 13 of AASHTO LRFD Bridge Design Specifications or Roadside Design Guide.\*
- Specify methodology of attaching fencing/guards to the wall, including attachment equipment and hardware.\*
- Anything labeled, "by others" has applicable documentation submitted along with the package.
- Maintenance access for future repair shown.\*
- All materials must be specified and manufacturer information must be on plans as applicable.
- The retaining wall must be coordinated with all applicable utility plans within the vicinity of the plan, even if the utility is not crossing the wall.\*
-