



AN ORDINANCE AMENDING THE UNIFIED DEVELOPMENT ORDINANCE OF THE TOWN OF NAGS HEAD, NORTH CAROLINA AS IT PERTAINS TO RESIDENTIAL STORMWATER MANAGEMENT REGULATIONS

ARTICLE I. Purpose(s) and Authority.

WHEREAS, pursuant to N.C.G.S. § 160D-701, the Town of Nags Head (the "Town") may enact and amend ordinances regulating the zoning and development of land within its jurisdiction and specifically the location and use of buildings, structures and land; pursuant to this authority and the additional authority granted by N.C.G.S. Chap. 160D-702, the Town has adopted comprehensive zoning regulations and has codified the same within the Unified Development Ordinance, Part II of the Town Code, adopted pursuant to N.C.G.S. § 160D-103, which allows the Town to combine certain land development ordinances into a unified ordinance; AND

WHEREAS, the Board of Commissioners directed staff to review changes to the Town of Nags Head Low Impact Development Manual in conjunction with the overall residential stormwater ordinance with homebuilders from the community; AND

WHEREAS, the Board of Commissioners finds that these text amendments are consistent with the goals, objectives and policies of the Town's adopted Comprehensive Plan, and that this action is reasonable and in the public interest, and is in the interest of and not contrary to the public's health, safety, morals and general welfare for the Town to amend the Town's Unified Development Ordinance as stated below.

ARTICLE II. Construction.

For purposes of this ordinance amendment, underlined words (underline) shall be considered as additions to existing Town Code language and strikethrough words (~~strikethrough~~) shall be considered deletions to existing language. Any portions of the adopted Town Code which are not repeated herein but are instead replaced by an ellipses ("...") shall remain as they currently exist within the Town Code.

ARTICLE III. Amendment of the Unified Development Ordinance.

NOW, THEREFORE, BE IT ORDAINED by the Board of Commissioners of the Town of Nags Head, North Carolina, that the Unified Development Ordinance of the Town Code shall be amended as follows:

PART I. That **Article 11, Environmental Regulations, Part 1. Stormwater, Fill and Runoff Management** be amended as follows:

Section 11.1 Purpose and Intent.

The purpose of this Part is to proactively protect, maintain and enhance the public health, safety, environment and general welfare by establishing requirements and procedures to effectively manage the site development process including the use of fill, site grading, and stormwater management ~~control the adverse effects of fill, land disturbance and increased post-development stormwater runoff~~ for the purposes of both water quantity management for flood prevention and

water quality protection with the goals to:

- 11.1.1.** Control and minimize impacts associated with stormwater runoff from all development and redevelopment.
- 11.1.2.** Mitigate current stormwater problems and prevent future problems associated with stormwater runoff.
 - 11.1.3.** Preserve water quality through proactive management practices.
 - 11.1.4.** Facilitate public understanding of stormwater management.
- 11.1.5.** Encourage the use of pilings and open foundations and minimize the use of fill, consistent with FEMA's coastal construction recommendations.
 - 11.1.6.** Improve stormwater management through use of low impact development techniques.
- 11.1.7.** Establish requirements for on-going management and maintenance of stormwater management practices.
- 11.1.8.** Establish application and enforcement procedures that address land disturbance, sedimentation and erosion control, the use of fill, and stormwater management practices consistent with associated Town ordinances and state and federal laws and regulations, to include:
 - 11.1.8.1.** Soil erosion and sedimentation control provisions (Article 11, Part II);
 - 11.1.8.2.** Excavations (Chapter 18 of the Town Code of Ordinances);
 - 11.1.8.3.** Flood damage prevention provisions (Article 11, Part III);
 - 11.1.8.4.** NCDEQ stormwater management (NCAC T15: 02H .1000);
 - 11.1.8.5.** NCDEQ soil erosion and sedimentation control (G.S. 113A-50—113A-71);
 - 11.1.8.6.** NCDEQ and Dare County Health Department subsurface, ground-absorption wastewater effluent disposal (NCAC T15A: 18A. 1900).
- 11.1.9.** Establish public awareness of potential surface and subsurface water drainage problems recognizing that development potential of some land may be limited.
- 11.1.10.** Regulate development and redevelopment which may create additional stormwater related burdens to the Town or adjacent properties.
 - 11.1.11** Cause every development and redevelopment employing Stormwater Control Measures to develop a maintenance plan, and place responsibility for maintenance with the property owners.

Section 11.2 Applicability of Article 11, Part I Provisions and Exceptions.

- 11.2.1.** The provisions of this Part are applicable to all development and/or redevelopment within the jurisdiction of the Town, except for land disturbance associated with investigations services, (i.e., lot or boundary survey), the evaluation of a property for septic suitability, or repair of existing septic systems.
- 11.2.2.** No development activity, including clearing, grading of a lot, the deposition of fill or the stockpiling of material for future use, shall occur except in compliance with the provisions, conditions, and limitations of a land disturbance permit as issued by a UDO Administrator. Other permits and plans may also be required, such as a floodplain permit, a sedimentation and erosion control permit, responsibility form, or sedimentation and erosion control plan, zoning, and building permits, in accordance with federal, state or local laws.
- 11.2.3.** The applicable permit shall govern the design, installation, and construction of stormwater management and control practices on the site. Compliance after project construction is governed by the

maintenance provisions of this ordinance and may require submission of a maintenance report upon request of the Town.

- 11.2.4.** The Town shall establish a fee schedule and stormwater review policy which may be amended and updated at the Board of Commissioners' direction.
- 11.2.5.** Applications must be complete and submitted to the Planning Department along with the appropriate fee established pursuant to this section. If the Stormwater Administrator or his or her designee finds that an application is incomplete, the applicant shall be notified of the deficient elements and shall be provided with an opportunity to submit a complete application. Before a land disturbance permit application is deemed complete, the Town or the applicant may request a consultation on a concept for the post-construction stormwater management system to be utilized in the proposed development project.
- 11.2.6.** Upon completion of a project, and before a certificate of compliance may be granted, the applicant shall certify that best management practices Stormwater Improvements and/or Stormwater Control Measures have been constructed in accordance with the approved stormwater management plans. For all projects other than single-family and two-family uses, best management practices shall be documented on the construction record filed with the Town for certificates of compliance.
- 11.2.7.** Installation of all stormwater management practices installed under the requirements of this ordinance shall be made prior to certificate of compliance unless financially guaranteed. The Town may enter into an agreement with the permit holder whereby the permit holder shall agree to complete all required improvements as specified on the approved land disturbance permit or stormwater plan, within a reasonable timeframe as determined by the Town. To secure this agreement, the permit holder shall provide a guarantee not exceeding 1.25 times (or 125 percent of) the projected cost of the improvements in the form of a performance bond with cost estimates to be reviewed and approved by the UDO Administrator. The surety performance bond shall be obtained from a surety bonding company authorized to do business in North Carolina and shall be payable to the Town of Nags Head. The duration of the bond shall be until such time as the improvements are approved by the Town, or three years.
- 11.2.8.** An approved land disturbance permit expires if work does not commence within six months of the date of issuance, or if work is discontinued for a period of more than one year, or the expiration or completion of a building permit. A new land disturbance permit shall be obtained to replace the expired permit before work can commence or re-commence unless the UDO Administrator grants a single, one-year extension of this time limit, for good cause shown, upon receiving a written request from the applicant before the expiration of the approved plan.

(Ord. No. 21-06-012 , Art. III, Pt. XII(Att. L), 6-2-2021)

Section 11.3 Administration.

11.3.1. Designation of Stormwater Administrator.

The UDO Administrator or his/her designee(s) is hereby appointed to administer and implement the provisions of this Part.

11.3.2. Duties and Responsibilities of the Stormwater Administrator.

Duties of the Stormwater Administrator shall include, but not be limited to:

- 11.3.2.1.** Managing land disturbance permit applications and review of associated plans in accordance with the standards of this Part;
- 11.3.2.2.** Issuance of land disturbance permits through the supervision of zoning administration and building inspections, so that land disturbance permits are integrated within site plan approval and any conditions placed upon a floodplain or development permit;

- 11.3.2.3.** Coordinating the application of this Part with the Town's engineer and zoning administration, building inspections, public works, floodplain management, and sedimentation and erosion control program functions;
- 11.3.2.4.** Ensuring the enforcement of this Part, including plan review, issuance of notices of violations, and monitoring of operations and maintenance requirements on an on-going basis;
- 11.3.2.5.** Maintaining up to date resource materials including the current edition of the ~~North Carolina Best Management Practices Manual~~, ~~the Town of Nags Head Best Management Manual~~, and ~~the Town of Nags Head Recommended Standard Details Manual~~; North Carolina NC DEQ Stormwater Design Manual and the Town of Nags Head Low Impact Development Manual;
- 11.3.2.6.** Promoting public education and reference materials on stormwater management, flood prevention and water quality protection.

Section 11.4 General Standards for Commercial, Mixed use, and All Non-Single Family or Non-Two-Family Residential Development, including Multi-Family Development.

- 11.4.1.** Redevelopment of property with existing commercial uses, mixed land uses or residential uses other than single-family or two-family residential uses does not require submission of a stormwater plan under the following circumstances:
 - 11.4.1.1.** The redevelopment is consistent with the zoning regulations of this UDO relating to redevelopment and nonconformities.
 - 11.4.1.2.** The redevelopment does not result in a net gain in built upon area.
 - 11.4.1.3.** The redevelopment does not include the importation of any fill material that results in elevation gain higher than pre-demolition grade.
 - 11.4.1.4.** The redevelopment includes a stormwater retrofit associated with flood mitigation property improvements which limits the importation of earthen fill material to no greater than 12 inches in depth.
- 11.4.2.** All redevelopment of property with commercial uses, mixed land uses or residential uses other than single-family or two-family residential uses resulting in a net gain in built upon area requires submission of a stormwater plan showing that the stormwater runoff generated by the increase will be directed into an approved stormwater management system designed to accommodate 4.3 inches of rainfall and that any best management practices constructed for the additional runoff comply with the same commercial standards established in subsection 11.4.3, below.
- 11.4.3.** All other development or redevelopment of property with commercial uses, mixed land uses or residential uses other than single-family or two-family residential uses requires submission of a stormwater plan showing that the development will meet or exceed the following standards:
 - 11.4.3.1.** All runoff from the project's built-upon area must be directed into an approved stormwater management system designed to accommodate the volume of runoff generated by a 4.3-inch design storm.
 - 11.4.3.2.** Infiltration systems shall provide a minimum of one foot of vertical clearance from the seasonal high water table and must be located in soils classified as sandy texture soils with a minimum infiltration rate of 0.52 inches per hour. Infiltration systems shall maintain a maximum retention time of five days for the 4.3-inch design storm.
 - 11.4.3.3.** Wet retention systems shall maintain a minimum retention time of 48 hours and a maximum retention time of five days for the 4.3-inch design storm.

- 11.4.3.4.** Overflows and discharges from best management practices shall discharge to an established drainage outfall or drainage way which is maintained by a government entity or the subdivision homeowner's association or as approved by the Town or other appropriate federal, state or local entity.
- 11.4.3.5.** All required state and federal permits shall be acquired prior to the establishment of a discharge into a drainage way. In no instance shall the system discharge to adjoining private property without the written consent of the adjoining property owner, establishment of appropriate easements, and filing of maintenance agreements with the Town.
- 11.4.3.6.** Fill shall not be permitted to exceed ~~base flood elevation~~ the regulatory flood protection elevation (RFPE), ~~except in cases where it is placed directly beneath a slab that is designed to meet the regulatory flood protection elevation as defined in Appendix A, Definitions. In these instances, fill may exceed the base flood elevation by up to 12 inches~~
~~to support a turn-down or thickened edge slab or beneath a slab that is supported by a ring-wall style foundation. Fill placed above the base flood elevation shall not extend beyond the outside edge of the slab. In areas in which there is no base flood, fill shall not exceed the amount required for wastewater permits required by the Dare County Health Department, or two (2) feet above pre-development surface elevation, whichever is higher.~~
In no case shall fill be placed or a lot be graded such that off-site drainage patterns are altered to direct stormwater runoff onto another property unless part of an approved plan with appropriate agreements or easements.
- 11.4.3.7.** Copies of operations and maintenance agreements must be filed with the Town prior to the issuance of the certificate of compliance.
- 11.4.3.8.** During construction, to prevent adverse effects onto adjoining properties or rights-of-way, temporary and/or permanent runoff control measures shall be installed after placement of fill. This can be achieved via implementation of:
- 11.4.3.8.1.** Installation of earthen diversion berms along the periphery of the property, or
- 11.4.3.8.2.** Installation of permanent Stormwater Control Measures which shall be maintained and kept operational for the duration of construction, or
- 11.4.3.8.3.** Other approved methods of erosion and Stormwater Control Measures.
- 11.4.3.9.** On-site permanent runoff control measures shall be installed, in conjunction with other on-site stormwater management practices, to intercept rainfall runoff from driveways that are sloped or graded towards the street or right-of-way. On-site permanent runoff control practices include, but are not limited to, slotted drains, driveway speed bumps or other approved methods of diverting, collecting and managing on-site runoff.
- 11.4.4.** Allowance for partial, temporary retention of stormwater within parking lots on all commercial sites. Up to 20 percent of a site's parking area may retain runoff up to 48 hours after a 4.3-inch rainfall event, so long as:
- 11.4.4.1.** Accessible parking spaces, as required by the American Disabilities Act (ADA), shall not be affected.
- 11.4.4.2.** Drive aisles, fire lanes, loading zones, ingress and egress facilities, traffic ways, pedestrian ways and other site access features shall not be affected.
- 11.4.4.3.** No impacts of stormwater shall be allowed to entities other than parking spaces and stormwater BMPs.

- 11.4.5.** Allowance for stormwater control and conveyance facilities built by others on Town rights-of-way or on adjacent or Town-owned properties upon approval of the Board of Commissioners. If as part of development or redevelopment there is an opportunity to improve, mitigate or correct a drainage problem caused by stormwater runoff from the site under review, the Board of Commissioners may approve stormwater management improvements outside of the subject property boundary if:
- 11.4.5.1.** An encroachment agreement and/or easement is put in place to allow for construction and use of the stormwater management improvements; and
- 11.4.5.2.** A maintenance agreement is filed with the Town establishing maintenance responsibilities and enforcement methods.
- (Ord. No. 21-06-012 , Art. III, Pt. XII(Att. L), 6-2-2021)

Section 11.5 General Standards for Residential Development on Individual Lots.

11.5.1. Stormwater Management Plan Applicability.

Stormwater management requirements shall apply to the following types of development:

- ~~**11.5.1.1.** New detached single-family and two-family residential properties;~~
- ~~**11.5.1.2.** Existing single-family and two-family residential properties where more than 500 square feet of new built-upon area is being added. In such cases, the stormwater management requirements shall apply only to the new built-upon area;~~
- ~~**11.5.1.3.** Removal and replacement of driveways. In instances where an existing driveway and parking area not meeting the standards of this section is being removed and replaced, the new driveway and/or parking area shall be designed so as to minimize limit the discharge of stormwater into the right-of-way or onto adjacent properties.~~

11.5.2. Stormwater Management Standards.

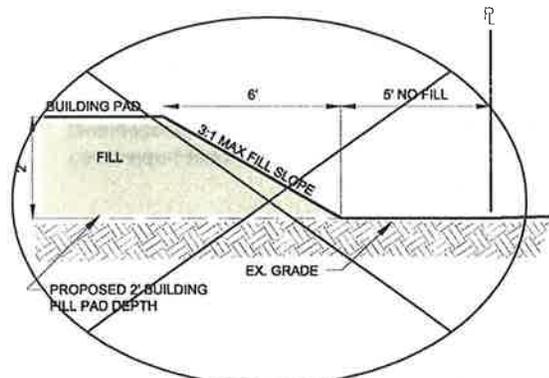
- ~~**11.5.2.1.** All runoff from the project's built-upon area shall be directed into an approved stormwater management system designed with a storage volume of 15 cubic feet for every 100 square feet of built-upon area.~~
- ~~**11.5.2.1** Projects that add built-upon area, as defined in Appendix A of the UDO, in excess of section 11.5.1.2., shall be designed so that runoff is not directly discharged onto adjacent properties or into the street and/or street right-of-way.~~
- ~~**11.5.2.2.** Stormwater control management (SCM) measures may include a variety of techniques used in combination to achieve the storage volume requirement. These include:~~
- ~~**11.5.2.2.1.** Rainwater harvesting to include cisterns and/or rain barrels~~
- ~~**11.5.2.2.2.** Subsurface drainage systems to include dry wells, french drains and infiltration galleries/panels~~
- ~~**11.5.2.2.3.** Permeable pavements~~
- ~~**11.5.2.2.4.** Tree/open space preservation credits~~
- ~~**11.5.2.2.5.** Bioretention or rain gardens~~
- ~~**11.5.2.2.6.** Landscaped swales~~
- ~~**11.5.2.2.7.** Infiltration basins~~
- ~~**11.5.2.2.8.** Other methods as approved by the stormwater administrator~~
- 11.5.2.2** Stormwater management plans that are prepared and submitted in accordance with section 11.5.4., which may include Stormwater Improvements as shown in Appendix A of the Town's Low-Impact

Development Manual and/or which are approved by the Stormwater Administrator, may be incorporated into the project design to demonstrate

compliance. Alternatively, the following techniques may be utilized in lieu of constructing Stormwater Improvements:

- 11.5.2.2.1. Stormwater runoff may be directed or rerouted to stabilized open space areas on the lot where the discharge area is at least 25 feet from all lot lines. If the discharge area contains significant stands of vegetation, the setback may be reduced to ten feet from all lot lines. Stormwater shall not be directly discharged onto an onsite wastewater system drain field.
- 11.5.2.2.2. No Stormwater Improvements shall be required in cases where the at-grade elevation measured ten (10) feet beyond the property line onto the adjacent property is equal to or higher than the proposed finished grade elevation. This shall be measured from either the top of the slab or from the proposed elevation under the building if no slab is proposed.
- 11.5.2.2.3. The Public Works Director may approve discharge of runoff into street right-of-way as part of the overall drainage plan and right-of-way drainage infrastructure improvements.
- ~~11.5.2.3. Guidance for applying and calculating the techniques listed above can be found in the Town of Nags Head Recommended Standard Details Manual. Stormwater Improvements shall be maintained in a manner consistent with the applicable requirements of the issued permit.~~
- ~~11.5.2.4. On-site permanent runoff control measures/improvements shall be installed, in conjunction with other on-site stormwater management practices, to intercept rainfall runoff from driveways that are sloped or graded towards the street or right-of-way. On-site permanent runoff control practices include, but are not limited to, permeable pavement ribbons, slotted drains, driveway speed bumps or other approved methods of diverting, collecting and managing on-site runoff. Measures to control runoff from driveways may be combined with other stormwater management techniques to meet the stormwater volume requirement.~~
- ~~11.5.2.5. In no instance shall Open drainage systems shall not be located beneath a building.~~
- ~~11.5.2.6. Storage capacity (interstitial storage) within existing soils and/or fill material shall not be counted towards the volume requirement for the stormwater management design.~~
- ~~**11.5.2.7. Reduction of built-upon area.** Certain stormwater management practices are encouraged and shall reduce the site's built-upon area in accordance with the following standards:~~
 - ~~11.5.2.7.1. Paved surfaces which are designed to be permeable in accordance with the Town of Nags Head Recommended Standard Details Manual or as otherwise approved by the stormwater administrator shall not count as built-upon area.~~
 - ~~11.5.2.7.2. The water surface area of pools, wood-slatted decks, and non-compacted, clean gravel and stone areas shall not count as built-upon area.~~
 - ~~11.5.2.7.3. Preservation and/or planting of vegetation shall reduce built-upon area in accordance with the following schedule:
 - ~~11.5.2.7.3.1. Existing trees receive a 100-square foot reduction in built-upon area (min. 6" diameter breast height).~~
 - ~~11.5.2.7.3.2. New trees receive a 50-square foot reduction in built-upon area (min. 6' tall).~~
 - ~~11.5.2.7.3.3. Trees must comply with list of approved species included in the Town's Vegetative Planting Guidelines.~~~~

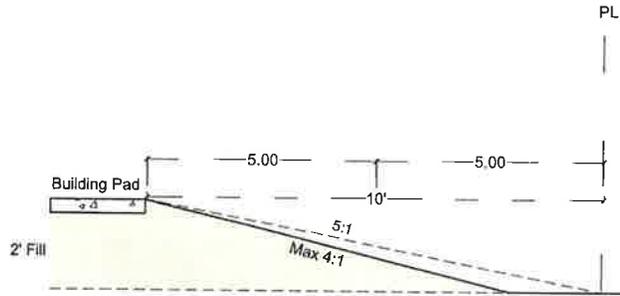
- 11.5.2.7.4.** Projects that reduce the overall limits of disturbance and designate areas of preserved open space shall receive a reduction in built-upon area:
- 11.5.2.7.4.1.** Open space areas and the credit for the reduction of built-upon area shall be calculated at a 2:1 ratio. For example, for every two square feet of preserved open space, built-upon area shall be reduced by one square foot.
 - 11.5.2.7.4.2.** Individual pockets or areas of preserved open space shall be a minimum of 250 square feet in area.
 - 11.5.2.7.4.3.** Preserved open space shall not be applied in areas of the lot that are typically excluded from development including ponds, or areas that are excluded from development by other agencies.
 - 11.5.2.7.4.4.** Preserved open space shall contain significant examples of locally adaptive and/or native trees and/or shrubs and shall be located in areas that create natural vegetative filtering or retention between built-upon areas and adjacent properties or rights-of-way.
 - 11.5.2.7.5.** Total tree credit and/or open space preservation credits in combination shall not reduce total built-upon area by more than percent.
 - 11.5.2.7.6.** Projects that incorporate or more of the stormwater control measures listed in subsection 11.5.2.2 above shall receive a 15 percent built-upon area reduction. This reduction shall be applied in addition to the built-upon area reductions already provided by this section. To receive this credit, each measure shall individually account for a minimum of 15 percent of the project's overall storage volume.
- 11.5.2.8. Fill shall not be placed within five feet of a property line, except for the grading of driveway entrances, such that runoff from a fill slope is not "pitched" onto adjoining properties. A maximum of a 3:1 horizontal to vertical fill slope shall be maintained. Setback area may be used to accommodate an approved stormwater control measure. See diagram below:



Setback Requirement Where Fill is Used

- 11.5.2.6.** A stormwater plan designed by a registered design professional to retain a 1.5-inch storm shall satisfy the requirements of Section 11.5.2.
- 11.5.2.7.** No fill material shall be re-distributed or placed on a lot in the rear or side setback areas unless the final horizontal to vertical slope is 4:1 or less. This shall be calculated from the finished final grade to

the rear and side property lines. All burden shall be on the applicant to confirm this condition.



Setback Requirement Where Fill is Used. A Stormwater measure may be required as per 11.5.2.2. Setbacks vary by zoning district.

~~11.5.2.9.~~ The five-foot Fill setback requirements may be varied or waived as part of a multi-lot development of contiguous properties, or between adjacent properties if and only if a dedicated easement is established to accommodate a shared drainage swale or other SCM Stormwater Improvement between adjacent properties as approved by the UDO Administrator.

~~11.5.2.10.8~~ The construction and use of bulkheads, walls, and other structural controls to retain the placement of fill on property shall only be permitted:

~~11.5.2.108.1.~~ In the immediate area of the on-site sewage disposal system as approved by the Dare County Health Department for the installation of such system, or

~~11.5.2.108.2.~~ In those areas of the property where the naturally occurring slope exceeds 3:1 or greater in steepness, or

~~11.5.2.108.3.~~ In those areas of where a retaining wall is necessary to achieve a five-foot setback of fill from compliance with the fill requirement in 11.5.2.7, as relates to adjacent property boundary. Retaining walls used on fill slopes shall not be tiered, shall not retain more than two feet of fill, and shall not exceed two feet in total maximum height from original final grade.

~~11.5.2.11.9.~~ The allowable depth or elevations for fill are in subsection 11.5.3 of this section.

11.5.3. Standard for Depth or Elevation of Fill.

Any residential development or redevelopment which utilizes fill shall be limited to the following standards:

11.5.3.1. Properties East of NC 12 and SR 1243.

11.5.3.1.1. The placement of site-compatible, non-structural fill under or around an elevated building is limited to two (2) feet. Fill greater than two (2) feet must include an analysis prepared by a qualified registered design professional demonstrating no

harmful diversion of floodwaters or wave runup and wave deflection that would increase damage to adjacent elevated buildings and structures. Excavated material moved or relocated onsite is considered fill.

- 11.5.3.1.2.** The fill material must be similar and consistent with the natural soils in the area.
- 11.5.3.1.3.** Minor grading and the placement of minor quantities of nonstructural fill, outside the areas referenced in 11.5.3.1.1., may be permitted for landscaping and for drainage purposes and for support of parking slabs, pool decks, patios and walkways.
- 11.5.3.1.4.** Nonstructural fill with finished slopes that are steeper than five (5) units horizontal to one (1) unit vertical shall be permitted only if an analysis prepared by a qualified registered design professional demonstrates no harmful diversion of floodwaters or wave runup and wave deflection that would increase damage to adjacent elevated buildings and structures.
- ~~**11.5.3.1.1.** Fill shall be subject to the provisions of Section 11.44.3.11.~~
- ~~**11.5.3.1.2.** Areas of fill exceeding the height of existing grade shall not exceed ten (10) percent of the lot area (see Article 8, District Development Standards), excluding the footprint of the active drainfield and septic system as approved by the Dare County Health Department in accordance with the septic permit. Lot area is defined as that portion of the lot landward of the first line of stable vegetation as defined by CAMA.~~
- 11.5.3.1.3.** No bulkheads are allowed.
- 11.5.3.1.6.** Within the Village at Nags Head, only parcels with direct frontage on the Atlantic Ocean/ocean beach shall be considered a Coastal High Hazard area with an RFPE of 12.

11.5.3.2. Properties West of NC 12 and SR 1243.

- 11.5.3.2.1.** In areas where the most recent Flood Insurance Rate Map (FIRM) provides a base flood elevation for a subject property, fill shall not exceed the amount required for wastewater permits required by the Dare County Health Department, or the base flood elevation, whichever is greater. However, when fill is proposed to be placed directly beneath a slab that is designed to meet the base flood elevation depicted on the FIRM, fill may exceed the base flood elevation by up to twelve inches (12") to support a turn-down or thickened edge slab or beneath a slab that is supported by a ring-wall style foundation; when designed in this manner, fill placed above the base flood elevation shall not extend beyond the outside edge of the slab.
- 11.5.3.2.1.** Fill shall not be permitted to exceed the regulatory flood protection elevation (RFPE), the amount for wastewater permits required by the Dare County Health Department, or two (2) feet above pre-development surface elevation, whichever is higher.
- 11.5.3.2.2.** In areas where the most recent Flood Insurance Rate Map (FIRM) provides no base flood elevation, fill shall not exceed the amount required for wastewater permits required by the Dare County Health Department, or two feet (2') above pre-development surface elevation, whichever is greater.
- 11.5.3.3** Pre-development surface elevations shall be taken at the four corners of the building footprint. These elevations shall be averaged for the purposes of determining fill height. In cases where the building footprint is irregular and has more than four

sides, pre-development surface elevations shall be taken using the four outermost building corners.

11.5.3.4 Lot depressions may be filled, either by grading materials from other locations on the lot or by bringing in like-kind material, no higher than to the level of the directly adjacent pre-disturbance elevation completely surrounding the depression. The post-fill condition shall be considered as the pre-development surface elevation for the purpose of determining fill height.

11.5.4. Plan Submittal, Review and Approval for Residential Development on Individual Lots.

It is the responsibility of an applicant to provide sufficient information in the plan so that the Town or its agents may reasonably evaluate the environmental characteristics of the affected areas, the potential and predicted impacts of the proposed activity on area surface waters, and the effectiveness and acceptability of those measures proposed by the applicant for reducing adverse impacts. The applicant shall provide, as necessary, maps, tables, photographs, narrative descriptions and explanations to demonstrate compliance with the Town's stormwater management standards.

11.5.4.1. The stormwater management plan shall be submitted as part of the application for a building permit or land disturbance permit.

11.5.4.2. The stormwater management plan need not be prepared by a registered design professional. However, the Town will consider plans and additional alternatives to meet the stormwater requirements if prepared by a registered design professional. An on-site meeting with the Stormwater Administrator or his/her designee is strongly encouraged prior to plan preparation.

11.5.4.3. The stormwater management design information may be depicted on a site survey that is also utilized for zoning, CAMA, or other Town approvals. At a minimum the plan shall include:

11.5.4.3.1. Existing Conditions. The conditions of the site shall be described in general, including the following:

11.5.4.3.1.1. The direction of flow of stormwater runoff under existing conditions.

11.5.4.3.1.2. The location of areas on the site where stormwater collects or infiltrates into the ground.

11.5.4.3.1.3. A survey of the site, including topography. The survey shall be prepared by a licensed surveyor and shall include the minimum required elevation information as referenced in the ~~Town of Nags Head Recommended Standard Details Manual~~ Town of Nags Head's Minimum Required Survey Information Template which can be found in Appendix A of the Town's Low Impact Development Manual. The survey must also show the location of drainage ditches within the area surveyed, and the location of wetlands, and ponds.

11.5.4.3.1.4. Approximate elevation of seasonal high-water table. "Seasonal high wetness condition" as indicated by the Dare County Health Department site evaluation is acceptable for determining vertical separation compliance of ~~SCMs~~ Stormwater Improvements on single family and two-family residential projects. Also, include any fill requirements provided with the Dare County Health Department septic approval.

11.5.4.3.2. Proposed Alterations. Proposed alterations of the site shall be described, including:

- 11.5.4.3.2.1.** Change(s) in topography. The proposed final elevations shall be shown in a manner that can be distinguished from the existing elevations. If there are abrupt changes in elevations, these should be clearly identified in the plans. These should be plotted on a scale that is easy to read and in a form that conveys the nature of changes that are proposed.
- 11.5.4.3.2.2.** Identification and quantification of the area(s) that will be covered with built-upon area and a description of the surfacing material(s).
- 11.5.4.3.2.3.** ~~The proposed area to be preserved and/or planted with vegetation as well as any designated open space. This shall include the location of any trees and/or open space that will be utilized to reduce the built-upon area calculations.~~
- 11.5.4.3.2.3.** The proposed area to be preserved and/or planted with vegetation as well as any significant existing vegetation. This shall include the location of any tree greater than six inches in diameter at breast height (dbh) or 4.3 feet above the ground.
- 11.5.4.3.2.4.** Identification and quantification any other site improvements such as pools, wood slatted decks, and permeable pavement.
- 11.5.4.3.2.5.** The size and location of any buildings or other structures, including bulkheads or retaining walls.
- 11.5.4.3.2.6.** ~~Stormwater Runoff Features. All SCMs intended to receive stormwater runoff from the proposed built-upon areas on the site shall be described and their location identified on the survey.~~
- 11.5.4.3.2.6.** Stormwater Improvements shall be described, and their location identified on the survey.
- 11.5.4.3.2.7.** Erosion and Sediment Control Measures. A description of the measures that will be put in place for the control of erosion and sedimentation shall be provided.
- 11.5.4.3.2.8.** Other Information. The applicant shall provide other information which the Town or its designated agent deems necessary for an evaluation of the development proposal for compliance with this chapter.
- 11.5.4.4.** Elevation data shall be provided on the foundation survey as required, and/or on the as built survey so as to determine compliance with the maximum fill height requirements of this chapter.
- 11.5.4.5.** Upon completion of stormwater management improvements, the Stormwater Administrator or his/her designee shall verify compliance via field inspection. Once a project is completed, stormwater management features shall be maintained in accordance with the approved plan and subsequent certificate of compliance.

(Ord. No. 20-06-008 , Art. II, Pt. VII, 6-3-2020; Ord. No. 20-09-013 , Art. III, Pt. I, 9-2-2020; Ord. No. 21-06-012 , Art. III, Pt. XII(Att. L), 6-2-2021)

Section 11.6 General Standards for Subdivisions.

11.6.1. Commercial Subdivisions.

All runoff from the subdivision's built-upon area, ~~including proposed streets,~~ must be directed into an approved stormwater management system designed to accommodate the runoff generated by a 4.3-inch design storm. Overflow shall not be conveyed off-site to private property

or public rights-of-way for disposal except upon the establishment of appropriate easements and maintenance agreements among all impacted parties and upon Town approval.

11.6.2. Residential Subdivisions.

All runoff from the subdivision's built-upon area, including proposed streets, must be directed into an approved stormwater management system designed to accommodate the runoff generated by a 1.5-inch design storm. Overflow shall not be conveyed off-site to private property or public rights-of-way for disposal except upon the establishment of appropriate easements and maintenance agreements among all impacted parties and upon Town approval.

11.6.3. Future Phase Development.

Management of stormwater from part or all of the future development on commercial or residential sites may be deferred in a phased plan until a given phase is subject to site plan review. The subdivision plat shall clearly identify the specific areas of future phase development and the extent to which management of stormwater is deferred.

11.6.4. ROW/Common Areas.

Use of fill within proposed rights-of-way or other common areas shall not exceed the ~~base flood elevation~~ Regulatory Flood Protection Elevation (RFPE) ~~base flood elevation~~ for the zone in which the fill is proposed.

11.6.5. Operation and Maintenance Agreement.

All stormwater plans must include an operation and maintenance agreement that provides for on-going maintenance of the proposed stormwater management system and which assigns responsibility to an owners association as part of any covenants or deeds that run with the individual parcels.

Section 11.7 Stormwater Management Plan Submittal and Approval Requirements.

11.7.1. Preparer's Certification.

Commercial, mixed-use or multi-lot development such as a subdivision, stormwater management plans and supporting technical documents shall be prepared by a qualified and registered design professional knowledgeable within the field of work for the performance of the design, construction, and operation and maintenance of what is being proposed.

11.7.2. Supporting Documentation.

Supporting plans and documentation including assumptions, methodology, calculations and conclusions shall be submitted to the Town as part of the application.

- 11.7.2.1. For all subdivisions and commercial applications, a stormwater management plan with all supporting documentation meeting all Town requirements and standards shall be submitted with the plat or site plan application for approval by the Town Engineer.
- 11.7.2.2. For special uses, a preliminary stormwater management plan shall be submitted with the special use permit application. A stormwater management plan with all supporting documentation meeting all Town requirements and standards shall be submitted with, or in advance of, the application for a building permit.

11.7.3. Submittal Requirements.

The stormwater management plan shall include engineered drawings, non-engineered drawings, maps, assumptions, calculations and narrative statements, including:

- 11.7.3.1. **Existing Conditions.** Sheets or maps indicating existing features, including buildings, ground surface elevations, landforms, parking areas, roadways, structures, subsurface utilities, surface utilities, surface waters, watercourses, vegetation, and other significant elements. Elevations shall be provided in sufficient detail to determine the efficacy of proposed Stormwater Improvements and

compliance with all stormwater and fill requirements. At a minimum, pre-disturbance spot elevations shall be provided beneath proposed improvements and along property lines adjacent to any fill slopes.

11.7.3.2. Project boundaries clearly depicted and labeled, including any staging areas.

11.7.3.3. Locations and elevations of the adjoining street pavement, shoulder, ditches, and drainage systems, as well as upstream and downstream driveway culverts.

11.7.3.4. *Approximate elevation of seasonal high-water table.* "Seasonal high wetness condition" as indicated by the Dare County Health Department site evaluation is acceptable for determining vertical separation compliance of BMPs on single family and two-family residential projects. Also include any fill requirements provided with the Dare County Health Department septic approval.

11.7.3.5. *Distance Measurements.* Lateral and vertical separation distances from AECs, state surface waters, subsurface water conditions, above ground and underground utilities, or other separation distances as required by existing federal, state or local laws clearly depicted.

11.7.3.6. *Proposed Conditions.* Sheets or maps indicating location of proposed features including areas where fill will be placed including the toe of fill slopes, buildings, ground surface elevations, landforms, parking areas, roadways, structures, subsurface utilities, landscaping, and other significant elements.

11.7.3.7. Drawings shall describe the proposed elements and their association with existing elements with spot elevations depicted in areas of proposed fill and finished floor elevations for all proposed buildings/structures described. Notational information shall be provided which includes existing surface elevation at each site element, proposed maximum fill depths for each site element, and maximum fill depth within the project site.

11.7.3.8. Location and description of stormwater BMPs proposed to capture runoff from all surfaces within a given drainage area.

11.7.3.9. Location of erosion control measures relative to fill slopes and disturbed areas. This shall include any temporary measures that will be necessary to retain stormwater or other construction related water discharges on the property during construction prior to the installation of final Stormwater Improvements.

11.7.4. *Operations and Maintenance Agreement.*

An operations and maintenance agreement shall be submitted to and be approved by the Town. The operations and maintenance agreement shall address sediment removal, mowing and re-vegetation, immediate repair of eroded areas, debris removal, and unclogging of any structures. The operations and maintenance agreement may provide for access by the Town and its agents to all stormwater management measures at the site for the purposes of inspection, maintenance, reporting, and repair operations. The operations and maintenance plan shall run with the property and compliance shall be the responsibility of the property owner.

11.7.5. *Easements/Covenants.*

Copies of all recorded easements or covenants that run with the property and are necessary for continued function of the best management practices utilized for plan approval.

11.7.6. *Certification.*

Upon completion of construction, stormwater management facilities shall be certified by the stormwater plan preparer or a qualified and authorized professional as having been constructed in substantial conformity with the Town-approved plans and specifications. The acceptability of a certification by any other person than the person who prepared the original design shall be at the sole discretion of the Town. A copy of this documentation shall be submitted to the Town prior to the issuance of a certificate of compliance.

11.7.7. Construction Record or As-Built Plans.

The construction record survey or plan shall include any on-site stormwater management measures and shall be prepared once final construction has been completed. These plans shall be prepared by a licensed surveyor and shall include all of the elements shown as proposed on the approved construction plans and depict sufficient topographic information to demonstrate compliance with the approved plans. These shall be submitted to the Town prior to the issuance of a certificate of compliance.

(Ord. No. 21-06-012 , Art. III, Pt. XII(Att. L), 6-2-2021)

Section 11.8 Operations and Maintenance Requirements.

11.8.1. For All Projects Other than Residential Development on Individual Lots.

11.8.1.1. An operations and maintenance agreement based on the operations and maintenance plan shall be executed by the owner or amongst the owners and approved by the Town prior to issuance of a certificate of compliance.

11.8.1.2. The operations and maintenance agreement:

11.8.1.2.1. Shall require the owner or owners to maintain, repair, and if necessary, reconstruct the stormwater management features, and

11.8.1.2.2. Shall state the terms, conditions, and schedule of maintenance for the stormwater management features, and

11.8.1.2.3. May grant to the Town a right of entry into the property to inspect, monitor, maintain, repair, or reconstruct the stormwater management features. However, in no case shall the right of entry confer an obligation on the Town to assume responsibility for the stormwater management features.

11.8.1.3. Operations and maintenance agreement recordation requirements. Prior to issuance of a certificate of compliance for any project served by stormwater management features required by this ordinance, the operations and maintenance agreement shall be recorded as a deed restriction or protective covenant with the Dare County Register of Deeds Office binding all subsequent property owners to compliance with the agreement.

11.8.2. Approval Required.

The Town-approved stormwater management system shall not be altered without approval of the Town Engineer.

11.8.3. Maintenance.

Failure to maintain on-site stormwater management facilities shall be grounds for a notice of violation, civil penalties and possible revocation of occupancy permits in accordance with Section 1.10, Violation of UDO Regulations.

(Ord. No. 21-06-012 , Art. III, Pt. XII(Att. L), 6-2-2021)

Section 11.9 Reference Documents.

11.9.1. The Town has prepared a ~~Town of Nags Head Recommended Standard Details Manual~~ Low Impact Development Manual which includes guidance on specific Stormwater control measures, ~~Improvements~~ and other requirements of this ordinance. The Town will make copies of the most current ~~Town Recommended Standard Details Manual and the most current NCDEQ BMP manual~~ Town of Nags Head Low Impact Development Manual and the most current NCDEQ Stormwater Design manual available to applicants.

11.9.2. Applicants for permits under this Part shall refer to the most current editions of the ~~NCDEQ BMP manual~~ NCDEQ Stormwater Design Manual

and the Town's Low Impact Development Manual if citing them for the design, construction and maintenance management practices on the site associated with the application. Stormwater treatment practices that are designed, constructed, and maintained in accordance with the NCDEQ BMP manual, NCDEQ Stormwater Design Manual and the Town's Low Impact Development Manual will be presumed to meet the minimum water quality and quantity performance standards of this Part.

- 11.9.3.** Applicants for permits under this Part may propose utilization of a stormwater management practice or practices which are not designed, constructed, or maintained in accordance with the NCDEQ BMP manual and the Town Recommended Standard Details Manual, NCDEQ Stormwater Design Manual and the Town Low Impact Development Manual. In such cases, the applicant shall have the burden of demonstrating that the practice(s) will satisfy the minimum water quality and quantity performance standards of this ordinance and the practices must be approved by the UDO Administrator.
- 11.9.4.** Upon review and evaluation of an application for a permit under this Part, the Stormwater Administrator may recommend management practices regarding a particular site. If upon review and inspection the UDO Administrator determines that the environmental conditions of a particular site will not support the management practices proposed by an applicant, the UDO Administrator may require reasonable changes to the application, professional certification of a particular design and/or evaluation of the proposal by the Town

Engineer. The UDO Administrator may require any reasonable changes to an application proposed by the Town Engineer.

Section 11.10 Discharge of Stormwater, Pool Water, Hot Tub Water, and De-Watering Effluent.

- 11.10.1.** It shall be prohibited to discharge or direct water onto adjoining properties without appropriate easements or agreements from any source under the control of the owner of the premise, to include retained stormwater runoff, swimming pools, hot tubs, heating and air conditioning systems, or groundwater from de-watering activities.
- ~~**11.10.2.** Temporary discharge of retained stormwater or water from other sources into the Town right-of-way is allowable only with the permission of the Town Manager, Public Works Director or Town Engineer.~~
- 11.10.2.** Discharge of retained stormwater or water from other sources into the Town right-of-way is allowable only with the express written permission of the Town Manager, Public Works Director or Town Engineer.
- 11.10.3.** Temporary discharge of retained stormwater or water from other sources into the NCDOT right-of-way is allowable only with permission of NCDOT and a properly executed NCDOT encroachment agreement.
- 11.10.4.** Upon a determination that this section is being violated, the Stormwater Administrator may immediately issue a notice of violation and civil citation without need for a warning citation under Section 1.10, Violation of UDO Regulations or Town Code 1-6. Upon receipt of the notice of violation, the violator shall immediately cease and desist the activity which is in violation of this section. In the event that a violation imminently affects public safety, health or welfare, the Town may take action to abate the violation in a manner which appropriately balances the need for public safety with the need for due process of law.

(Ord. No. 21-06-012 , Art. III, Pt. XII(Att. L), 6-2-2021)

Section 11.11 Public/Private Conflicts.

Where it has been determined that stormwater runoff from Town rights-of-way or Town-owned facilities contributes to a stormwater runoff problem on private property, a landowner may file a written request to the

Board of Commissioners to consider landowner's concerns or to propose a solution. The Town Board may consider requests and determine whether or not to take any action.

Section 11.12 Drainage within Town Rights-of-Way.

- 11.12.1.** An un-obstructed flow path for drainage infrastructure along Town rights-of-way shall be maintained. Town rights-of-way are necessary for legal/uncontested access by local government to drainage courses and infrastructure so that they may be constructed, maintained and improved to enhance public health and safety. Improperly installed fencing, landscaping, or the creation of other impediments or changes within the right-of-way may interfere with drainage along the roadway.
- 11.12.2.** Construction or installation of permanent or temporary structures, landscaping, grading alterations, or other encroachments within, under, above, or upon any public right-of-way, are prohibited without the express permission from the Town.
- 11.12.3.** Homeowners shall be responsible for maintenance of Town approved right-of-way encroachments, including culverts, other stormwater improvements, driveway maintenance, routine grounds maintenance such as grass mowing, and trash or debris removal that may impede the flow of water within drainage conveyances.
- 11.12.4.** Upon approval by the Board of Commissioners, the Town may allow and may accept for maintenance, stormwater control and conveyance facilities built by others on Town rights-of-way or on Town-owned properties.
 - 11.12.4.1.** The design of such facilities shall be approved by the Town at the sole discretion of the Town, and the construction of such facilities shall be in strict conformity with the approved design.
 - 11.12.4.2.** Approval can only be granted after an identification and evaluation analysis of significant cumulative impacts on the entire drainage system, up to the ultimate point of disposal, utilizing such supporting information, documents, evaluations, studies and other resources as the Town may deem necessary.
 - 11.12.4.3.** The Town may establish and impose review fees to cover the cost of design review and construction inspection, and facility fees to cover the cost of capital impacts resulting from the proposed facilities.
 - 11.12.4.4.** The operation and maintenance of facilities accepted by the Town for maintenance on Town rights-of-way or Town-owned property shall be at the expense of the Town.

Section 11.13 Penalties for Violation of Article 11, Part I.

Violation of this Article 11, Part I shall subject the offender to remedies prescribed in Section 1.10, Violation of UDO Regulations or Chapter 1-6 of the Town Code.

Section 11.14 Variances, Waivers, and Appeals.

Variances, Waivers, and appeals to Part I, Stormwater, Fill, and Runoff Management shall be granted in accordance with Article 3, Legislative/Quasi-Judicial Procedures.

Section 11.15 Conflict with Other Laws.

Where this Part imposes greater restrictions or higher standards than required in any federal or state statute or other local ordinance or regulation, the provisions of this Part shall govern. When the provisions of any other statute or local ordinance impose greater restrictions or higher standards than are required by the provisions of this Part, the provisions of that statute or ordinance shall

govern.

Section 11.16 Validity.

If any section, subsection, sentence, clause or phrase of this Part is for any reason held to be invalid, that decision shall not affect the validity of the remaining portions of this Part. The Board of Commissioners declares that it would have passed the ordinance and each section, clause and phrase of it even if any one or more sections, sentences, clauses or phrases may be declared invalid.

Sections 11.17—11.20 Reserved.

PART II. That **Article 11, Part III, Flood Damage Prevention, Section 11.44.3.11, Fill/Grading** be amended as follows,

11.44.3.11. Fill/Grading

11.44.3.11.1. ~~Fill shall conform to Section 11.5.3.1. The placement of site-compatible, non-structural fill under or around an elevated building is limited to two (2) feet. Fill greater than two (2) feet must include an analysis prepared by a qualified registered design professional demonstrating no harmful diversion of floodwaters or wave runup and wave deflection that would increase damage to adjacent elevated buildings and structures. Excavated material moved or relocated onsite is considered fill.~~

11.44.3.11.2. ~~The fill material must be similar and consistent with the natural soils in the area.~~

11.44.3.11.3. ~~Minor grading and the placement of minor quantities of nonstructural fill, outside the areas referenced in 11.44.3.11.1., may be permitted for landscaping and for drainage purposes under and around buildings and for support of parking slabs, pool decks, patios and walkways.~~

11.44.3.11.4. ~~Nonstructural fill with finished slopes that are steeper than five (5) units horizontal to one (1) unit vertical shall be permitted only if an analysis prepared by a qualified registered design professional demonstrates no harmful diversion of floodwaters or wave runup and wave deflection that would increase damage to adjacent elevated buildings and structures.~~

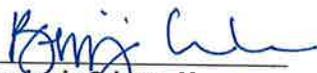
PART III. That **Appendix A, Section A.4 Definitions** be amended as follows,

Fill is the depositing of soil, rock, or other earthen materials by artificial means, but not including poured slab, asphalt, porous pavement, Turfstone™, or other manmade materials or surfaces designed in association with construction. Excavated material moved or relocated onsite is not considered fill for the purposes of determining fill height.

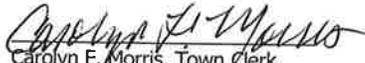
Fill depth height is the difference between the post-development surface elevation and the pre-development surface elevation.

Stormwater improvement is a change or addition made on or to the land, excluding buildings, that improve infiltration into the ground and the retention of stormwater runoff.

PART IV. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed. This ordinance shall be in full force and effect from and after the 2nd day of February 2022.


Benjamin Cahoon, Mayor
Town of Nags Head

ATTEST:


Carolyn F. Morris, Town Clerk



APPROVED AS TO FORM:


John Leidy, Town Attorney

ADOPTED February 2, 2022

MOTION TO ADOPT BY: _____
SECONDED BY: _____
VOTE: _____ AYES _____ NOES

