



MINIMUM STANDARDS

21 NCAC 28B .0501 GENERAL

(a) Prior to commencing work, services performed by a licensed landscape contractor ("licensed contractor") that exceed five thousand dollars (\$5,000.00) shall be described in writing and provided to the client or customer. This agreement may be authored by either party. This document shall contain:

- (1) Business name, license number, business address, and telephone number of the licensed contractor;
- (2) Name and address of client or customer;
- (3) Address or location of work to be performed, if different from the client or customer's address;
- (4) Date of proposal;
- (5) Description of work to be performed;
- (6) Total value in lump sum or time and material price;
- (7) Estimated time of completion;
- (8) Terms of payment;
- (9) Terms of warranty (if any);
- (10) Terms of maintenance, including party responsible for maintenance;
- (11) Signature of all parties by authorized individuals;
- (12) Statement that the licensed contractor is licensed by the Board, and the current address and phone number of the Board; and
- (13) Date of signing.

(b) All work performed by a licensed contractor shall meet all pertinent building codes, local ordinances, and project specifications. All work performed by a licensed contractor shall meet manufacturer's specifications.

(c) If project plans or specifications prepared by someone other than the licensed contractor do not meet pertinent codes and ordinances, the licensed contractor shall bring this to the attention of the client or customer.

(d) If the licensed contractor observes a condition while the work is being performed that requires attention beyond the original scope of work, the condition shall be reported to an immediate supervisor, the owner, or the person responsible for authorizing the work.

(e) The licensed contractor shall call for utility location services per N.C. 811 law.

(f) The licensed contractor shall maintain a safe work site.

21 NCAC 28B .0502 PLANTING

When planting, the licensed contractor shall:

- (1) Avoid potential planting conflicts with utilities and sight lines.
- (2) Protect plant material from physical damage and desiccation during transport.
- (3) Maintain plants during landscape construction.
- (4) Consider the cultural requirements of individual plants.
- (5) Excavate the plant hole sufficient to ensure ease of plant establishment and to promote long-term health typically measured at two times the width of the plant ball or container size.
- (6) Sidewalls of planting pit shall be scarified.
- (7) Set plants in an upright, plumb position, unless design intent dictates otherwise.
- (8) Set plants on a firm, solid base.
- (9) Remove all strings, twine, and strapping from around the trunk of trees.
- (10) Remove the top third to top half of burlap or other wrapping material on the rootball of balled and burlapped trees.
- (11) Remove top third to top half of wire baskets on balled and burlapped trees or bend basket wire back to be flush with the side of the ball.
- (12) Set the plant so that the top of root ball is at or slightly above surrounding soil and does not exceed 4" above the surrounding soil.
- (13) Prior to planting, insure that the trunk flare of a tree is not covered with soil, is at or above the surrounding finished grade, and that no soil has been placed on top of the root ball.
- (14) Prior to planting containerized plants, manage the rootball to mitigate problems such as circling roots. Acceptable mitigation methods shall include slicing the rootball, shaving the rootball, or redirecting roots.
- (15) Utilize backfill soil that is similar to the soil at the planting site or is amended to meet a specific objective.
- (16) Not firm backfill to a density that inhibits root growth.
- (17) Install backfill soil in such a manner that it is settled in layered sections to limit future settling.
- (18) Not utilize screened soil as the sole material for backfill.
- (19) When mulching plants, maintain a mulch depth that is beneficial to the health of the plants.
- (20) When mulch is applied, apply mulch so that it does not touch a tree trunk or root flare.
- (21) Water plants thoroughly and immediately after planting.
- (22) Notify client of his or her responsibility to water plants following installation.
- (23) Stake trees only when required due to high winds, extreme slopes, or soft soils;
 - (a) If trees are staked, the guys shall not be installed so as to provide pressure on the trunk.
 - (b) Guys in contact with the tree shall be of a material that will not damage the tree.
- (24) Provide plants that are true to name and species.
- (25) Provide plants that are healthy and in good condition.
- (26) Prune any broken limbs.

- (27) Prune co-dominant leaders in shade trees that typically have dominant leaders.
- (28) If a condition is observed while the work is being performed that is detrimental to the long-term health of the plant, the condition shall be reported to the customer or client, an immediate supervisor, the owner, or person responsible for authorizing the work.

21 NCAC 28B .0503 TURF

When establishing turf, the licensed contractor shall:

- (1) Notify the owner or the construction manager whether there is adequate time to establish the specified turf from seed within the construction schedule and prior to finish of the job;
- (2) Prior to lawn installation, loosen soil to a minimum depth of 3";
- (3) Confirm that all lawn seed meets the standards of the NC Seed Law of 1963, as set forth in G.S. 106, Art. 31;
- (4) Evenly distribute seed;
- (5) Apply seed at manufacturer's recommended rates;
- (6) Roll or rake after seeding to insure good soil contact;
- (7) Install sod within 36 hours of harvesting unless weather conditions and turf types dictate a shorter timeframe;
- (8) Lay sod strips in a staggered pattern, horizontal to slopes, and with tight seams;
- (9) Roll sod after installation to provide good soil contact;
- (10) Distribute sprigs evenly;
- (11) Insure that sprigs and sod plugs are in good contact with the soil;
- (12) Water lawn areas thoroughly and immediately after installation; and
- (13) Notify client of his or her responsibility to water turf following installation.

21 NCAC 28B .0504 FINISH GRADE

When grading, the licensed contractor shall:

- (1) Grade the surface such that the finish grade shall be smooth and free of depressions and debris;
- (2) Insure positive water flow through the site, away from structures, and in such a manner that there is no puddling or ponding; and
- (3) Comply with all local and national building codes and ordinances regarding slopes and drainage.

21 NCAC 28B .0505 DESIGN AND CONSULTATION

(a) With regard to design and consultation, the licensed contractor shall be permitted to perform work as defined in G.S. 89D-11(3) and 89D-12 on the following project sites:

- (1) A single family residential project of any size;
- (2) A non-single family project under one acre in total area;
- (3) A residential, institutional, or commercial project over one acre in total area that involves only planting and mulching; and

- (4) Any other project not prohibited by, or specifically exempted from, the provisions of Chapter 89A, Chapter 83A or Chapter 89C of the General Statutes.

(b) Additionally, the licensed contractor shall:

- (1) Obtain direct knowledge of site conditions by visiting the site;
- (2) Insure that designs meet all applicable state and local codes and standards; and
- (3) Consider the cultural requirements of individual plants.

21 NCAC 28B .0506 DRAINAGE SYSTEMS AND CISTERNS

Licensed contractors shall:

- (1) Install drainage systems and cisterns per state and local codes and ordinances;
- (2) Install drainage conveyances in such a way that there is a positive flow;
- (3) Install drainage systems with measures that allow cleaning of the system;
- (4) Install drainage systems with adequate structural integrity so as to prevent crushing of the drainage system;
- (5) Install French drain systems to drain to daylight or into existing storm drainage; and
- (6) Insure that cisterns and closed drywells include provisions for excess water overflow.

21 NCAC 28B .0507 LOW-VOLTAGE LIGHTING; POOLS

(a) When installing low-voltage landscape lighting systems, the licensed contractor shall:

- (1) Insure that all wire connections are waterproof;
- (2) Only use weather-proof fixtures;
- (3) Supply proper lamps with all fixtures;
- (4) Insure that the total lamp wattage of each circuit does not exceed the National Electrical Code (NEC) standard for the size of wire being used;
- (5) Not load a wire to more than 80% of the wire's capacity;
- (6) Connect all exterior low-voltage wiring to a ground fault circuit interrupter (GFCI) circuit;
- (7) Mount transformers a minimum of 18 inches above grade;
- (8) Perform a post-installation inspection to verify that the lighting system is fully operational as intended; and
- (9) Provide literature for the lighting components that lists proper lamps for fixtures to the client.

(b) All garden pools shall be installed per all regional and local codes.

21 NCAC 28B .0508 WALLS

(a) When installing retaining walls, the licensed contractor shall:

- (1) Adhere to all pertinent codes.
- (2) Adhere to manufacturer's or design professionals specifications.
- (3) Bury the first course of a retaining wall.

- (4) Insure that a retaining wall over 5 feet in height is designed by a professional engineer licensed under G.S. 89C.
 - (5) Insure that a retaining wall closer than 5 feet from a structure, regardless of height, is designed by a professional engineer licensed under G.S. 89C.
 - (6) Not construct dry-laid stone walls of a height more than 3 feet above grade.
 - (7) Include adequate sub-drainage systems behind the wall.
 - (8) Construct on a level, well compacted base of granular material at least 6 inches deep.
 - (9) Place backfill behind retaining walls in lifts no greater than 6 inches before compacted (each lift shall be well compacted).
 - (10) Insure that when constructing terracing walls not designed by an NC licensed design professional, the horizontal separation between walls shall be at least 50 feet or to current code.
 - (11) Prevent excessive runoff from passing over a retaining wall.
 - (12) Limit construction of vertically set timber walls to 4 feet in height.
 - (13) Construct vertically-set timber walls with above-ground heights equal to or less than the depth of timbers below grade.
 - (14) Install deadmen every fourth course on 8 feet centers when constructing horizontally-set timber retaining walls with staggered joints.
 - (15) Stagger the joints when constructing dry-laid stone walls. If successive vertical joints occur, the licensed contractor shall avoid running vertical joints more than two courses.
- (b) When installing freestanding walls, the licensed contractor shall:
- (1) Install footings for masonry and cast-in-place concrete freestanding walls of reinforced concrete. The top of the footing shall be at least 1 foot below grade.
 - (2) Reinforce freestanding walls as needed to prevent displacement from wind loads.
 - (3) Insure that moisture is prevented from entering a cavity wall during construction.
 - (4) Insure that segmental wall construction meets segmental wall manufacturer's specifications.

21 NCAC 28B .0509 PAVING

When paving, the licensed contractor shall:

- (1) Follow manufacturer's recommendations and specifications;
- (2) Choose paving materials that are appropriate for the project;
- (3) Install paving on a suitable, well compacted base;
- (4) Install paved surfaces with slopes sufficient to allow for surface drainage and to prevent ponding;
- (5) Install reinforcement in concrete slabs so that the reinforcement is suspended within the concrete and not resting on the base course;
- (6) Not pour concrete if air temperatures, away from artificial heat or in the shade, drop below 35 degrees Fahrenheit;

- (7) Not pour concrete if the air temperature in the shade is 90 degrees Fahrenheit and rising or if the concrete temperature is greater than 95 degrees Fahrenheit;
- (8) Use a suitable vibratory compacting device to set unit pavers and after joints are swept; and
- (9) Utilize an edge restraint on unit paver installations.

21 NCAC 28B .0510 PRUNING

When pruning, unless to achieve artistic intent, a licensed contractor shall:

- (1) Use sharp tools;
- (2) When making a pruning cut that removes a branch at its point of origin, make the cut close to the trunk or parent branch without cutting into the branch bark ridge or branch collar or leaving a stub;
- (3) Not flush cut;
- (4) Not top trees;
- (5) Remove branches in such a manner as to avoid damage to other parts of the plant or to other plants or property; and
- (6) Precut branches that are too large to support with one hand to avoid splitting the wood or tearing the bark.

21 NCAC 28B .0511 WILDFLOWER, NATIVE GRASS, AND NO-MOW SEED ESTABLISHMENT

When establishing wildflower, native grass or no-mow seeding, a licensed contractor shall:

- (7) During the preconstruction phase of the job, inform the owner or construction manager of the lead time required to establish native bunch grasses and forbs from seed and if this lead time is compatible with the construction schedule, providing clear expectations.
- (8) Confirm the suitability of the specified seed for the project.
- (9) Select seed that is regionally appropriate and of the geographic ecotype for the location of the project.
- (10) Use pure live seed (PLS) rates for seeding. If bulk seed is utilized, adjust rates accordingly.
- (11) Use a temporary cover, nurse crop or mulch when seeding that is non-allelopathic and seasonably appropriate.
- (12) Use highest seed rates on slopes greater than 30 degrees or when dormant seeding schedule is utilized.
- (13) Employ a seeding method that buries seed less than one-quarter inch in depth; cultipack or roll after seed distribution.

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