

REQUEST FOR TECHNICAL CHANGE

AGENCY: Irrigation Contractor's Licensing Board

RULE CITATION: 21 NCAC 23

DEADLINE FOR RECEIPT: December 15, 2015

NOTE WELL: This request when viewed on computer extends several pages. Please be sure you have reached the end of the document.

The Rules Review Commission staff has completed its review of this rule prior to the Commission's next meeting. The Commission has not yet reviewed this rule and therefore there has not been a determination as to whether the rule will be approved. You may call this office to inquire concerning the staff recommendation.

In reviewing these rules, the staff determined that the following technical changes need to be made. Approval of any rule is contingent upon making technical changes as set forth in G.S. 150B-21.10.

These rules are not formatted correctly. Please see 26 NCAC 02C .0108.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Jason S. Thomas
Commission Counsel
Date submitted to agency: December 1, 2015

REQUEST FOR TECHNICAL CHANGE

AGENCY: Irrigation Contractor's Licensing Board

RULE CITATION: 21 NCAC 23 .0104

DEADLINE FOR RECEIPT: December 15, 2015

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In reviewing these rules, the staff determined that the following technical changes need to be made. Approval of any rule is contingent upon making technical changes as set forth in G.S. 150B-21.10.

Lines 13-14 – “meeting the requirements of this Rule” is ambiguous because Rule .0104 does not state any requirement that classes or activities must meet in order to qualify for approval by the Board. Perhaps replace “meeting the requirements of this Rule” with “providing adequate education regarding the requirements of this Chapter.”

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Jason S. Thomas
Commission Counsel
Date submitted to agency: December 1, 2015

1 21 NCAC 23 .0104 is re-adopted with substantive changes as published in 30:03 NCR

2
3 **21 NCAC 23 .0104 CONTINUING EDUCATION**

4 (a) Continuing Education (CEU) credit shall not be obtained for the same course more frequently than every three
5 years.

6 (b) Each individual licensee must earn ten hours of approved continuing education each calendar year. The 10
7 hours shall include at least two but not more than four hours of business education. The remaining hours of
8 continuing education shall consist of training in landscape and turf irrigation technology.

9 ~~(c) A licensed contractor may carry forward from the year earned to the following year up to 10 hours of continuing
10 education.~~

11 ~~(c)~~ (c) A licensed contractor shall provide proof of attendance for all continuing education upon request by the
12 Board.

13 ~~(d)~~ (d) Only continuing education classes or activities that have been approved by the Board as meeting the
14 requirements of this Rule satisfy the licensee's continuing education requirement.

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16 *History Note: Authority G.S. 89G-5; 89G-9;*
17 *Eff. July 1, 2011.*
18 *Readopted Eff. January 1, 2016*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Irrigation Contractor's Licensing Board

RULE CITATION: 21 NCAC 23 .0206

DEADLINE FOR RECEIPT: December 15, 2015

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Line 6 – insert a comma after “faith”

In your History Note, please add references to 150B-40 and 150B-41.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Jason S. Thomas
Commission Counsel
Date submitted to agency: December 1, 2015

1 21 NCAC 23 .0206 is readopted without substantive changes as published in 30:03 NCR

2
3 **21 NCAC 23 .0206 CONDUCT OF HEARING**

4 (a) Hearings in contested cases shall be conducted by a majority of the Board or referred to the Office of
5 Administrative Hearings pursuant to G.S. 150B-40(e).

6 (b) Disqualification. An affidavit seeking disqualification of any Board member, if timely filed in good faith shall
7 be ruled on by the remaining members of the Board. An affidavit is considered timely if it is filed:

8 (1) Prior to the hearing; or

9 (2) As soon after the commencement of the hearing as the affiant becomes aware of facts which give
10 rise to his or her belief that a Board member should be disqualified.

11 (c) Evidence. The admission of evidence in a hearing in a contested case shall be as prescribed in G.S. 150B-41.

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13 *History Note: Authority G.S. 89G-5; 150B-38;*
14 *Eff. July 1, 2011;*
15 *Amended Eff. April 1, 2015.*
16 *Readopted Eff. January 1, 2016.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Irrigation Contractor's Licensing Board

RULE CITATION: 21 NCAC 23 .0207

DEADLINE FOR RECEIPT: December 15, 2015

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In reviewing these rules, the staff determined that the following technical changes need to be made. Approval of any rule is contingent upon making technical changes as set forth in G.S. 150B-21.10.

In your History Note, please add a reference to 150B-42.

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Jason S. Thomas
Commission Counsel
Date submitted to agency: December 1, 2015

1 21 NCAC 23 .0207 is re-adopted without substantive changes as published in 30:03 NCR

2
3 **21 NCAC 23 .0207 DECISION OF BOARD**

4 (a) The form and content of the Board's decision in a contested case shall be as prescribed by G.S. 150B-42(a), and
5 its decision shall be served upon the parties in a manner consistent with that statute.

6 (b) At the conclusion of the hearing and deliberations, the Board shall announce its findings of fact and conclusions
7 of law. If the Board concludes that the hearing respondent has violated a provision of the rules in this Chapter or of
8 G.S. 89G, it shall announce the nature and extent of any sanction it orders be imposed upon the hearing respondent.
9 The Board shall then direct its legal counsel, the respondent's counsel, if represented, or such independent legal
10 counsel as may be provided by the North Carolina Department of Justice for the purpose of advising the Board in
11 the course of that hearing, to draft a proposed order consistent with its announcement. The order shall be drafted in
12 accordance with G.S. 150B-42.

13 (c) The official record of the hearing in a contested case shall contain those items specified in G.S. 150B-42(b).

14
15 *History Note: Authority G.S. 89G-5; 150B-38;*
16 *Eff. July 1, 2011;*
17 *Amended Eff. April 1, 2015.*
18 *Readopted Eff. January 1, 2016*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Irrigation Contractor's Licensing Board

RULE CITATION: 21 NCAC 23 .0406

DEADLINE FOR RECEIPT: December 15, 2015

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In reviewing these rules, the staff determined that the following technical changes need to be made. Approval of any rule is contingent upon making technical changes as set forth in G.S. 150B-21.10.

Page 1, line 5 – insert a comma after “run-off”

Page 1, line 12 – replace “station/zones” with “station or zones”

Page 1, line 13 – insert “or requirements” between “conditions” and “include”

Page 1, line 15 – replace “are” with “shall be” or “may be,” depending upon what you mean.

Page 1, line 34 – replace “having” with “with”

Page 1, line 40 – what do “visually intrusive” and “easy to locate” mean? How would a contractor know whether he or she is in compliance with this requirement?

Page 1, line 44 – insert “and in any event shall” before “maintain” if that is what you mean. If that is not what you mean, please explain whether you intend to require at least one foot between pipes and trunk regardless how small a tree is.

Page 1, lines 47 – what is the “root protection zone” – is this term defined?

Page 1, line 48 – How can a trench be perpendicular to the tree trunk? Isn't a trunk essentially circular? What does this mean?

Page 1, lines 49-50 – the second phrase of the second sentence of this subparagraph (“but maintain a distance...”) appears to directly contradict the requirement set out in Subparagraph (n)(2). Please explain and resolve this apparent contradiction.

Page 2, line 4 – what does “along the same line and along the side of the main line” mean? This phrase seems impenetrable.

Jason S. Thomas
Commission Counsel
Date submitted to agency: December 1, 2015

Page 2, line 11 - what does "easy maintenance" mean? How would a contractor know whether he or she is in compliance with this requirement?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Jason S. Thomas
Commission Counsel
Date submitted to agency: December 1, 2015

1 21 NCAC 23 .0406 is readopted without substantive changes as published in 30:03 NCR

2
3 **21 NCAC 23 .0406 COMPONENTS AND ZONE DESIGN**

4 (a) An irrigation contractor shall design the layout of heads and other emission devices to reduce evaporation loss,
5 reduce surface run-off and limit overspray across or onto a street, public driveway or sidewalk, parking area, building,
6 fence, or adjoining property.

7 (b) When changes are required an irrigation contractor shall specify in the plan notes that any required equipment shall
8 meet or exceed the design standards of the system.

9 (c) An irrigation contractor shall design sprinkler head spacing with an approximate "head-to-head" coverage, unless the
10 coverage is designed for wind derating. Wind derating shall be based on wind criteria for the time period that the system
11 is normally operated.

12 (d) An irrigation contractor shall use separate station/zones (hydrozones) for areas with dissimilar environmental
13 conditions or dissimilar water or scheduling requirements. These conditions include sun exposure, plant type, soil type,
14 varying wind conditions, grades, and dimensional issues. When not practicable due to accessibility, dimensional issues
15 or other constraints, practical modifications to this standard are acceptable.

16 (e) An irrigation contractor shall, when selecting system components:

17 (1) Select components to avoid surface runoff;

18 (2) Select components to keep the sprinkler precipitation rate below the infiltration rate of the soil;

19 (3) Specify the use of repeat cycles to allow the water to soak into the root zone; and

20 (4) Specify stations or zones for sprinklers at the top and toe of sloped areas.

21 (f) An irrigation contractor shall locate sprinkler heads based on an evaluation of physical, environmental, and hydraulic
22 site conditions, including typical wind conditions during the normal irrigation period.

23 (g) An irrigation contractor shall divide the irrigation systems into zones consistent with the types of sprinkler heads and
24 nozzles being used in order to achieve an approximate matched precipitation rate.

25 (h) An irrigation contractor shall utilize water-conserving equipment as follows:

26 (1) Check valves to minimize low-head drainage when grades exceed five percent;

27 (2) Pressure regulators or pressure compensating devices when pressures exceed manufacturer's
28 recommendations;

29 (3) Rain sensors to suspend irrigation during rain or other forms of precipitation;

30 (4) A controller that has multi-program capability with at least four start times (for multiple repeat soak
31 cycles) and run time adjustments in one-minute increments; and

32 (5) Low-trajectory sprinkler nozzles and modified head spacings to mitigate the effects of wind.

33 (i) An irrigation contractor shall select components that do not mist when manufacturer's pressure specifications are met.

34 (j) An irrigation contractor shall design irrigation systems having control wire splices made with a waterproof wire splice
35 kit that is UL listed for underground applications. The design shall specify the manufacturer's recommended splice kits
36 for two-wire control systems.

37 (k) An irrigation contractor shall offset turf grass sprinklers from pavement edges a minimum of two inches to allow for
38 edging of the turf.

39 (l) An irrigation contractor shall offset sprinklers from vertical walls to limit spray on the walls.

40 (m) An irrigation contractor shall locate valves so as not to be visually intrusive while being easy to locate.

41 (n) An irrigation contractor shall protect the roots of existing trees by:

42 (1) Planning pipe system layout to limit its effect on existing trees and other planting.

43 (2) Maintaining a distance of one foot between trenches and tree trunks for every inch of tree diameter at a
44 height of four feet six inches above the ground, maintain a distance of one foot between pipes and the
45 tree trunk. For example, piping shall be kept at least 20 feet away from the trunk of a tree having a 20
46 inch diameter at four feet six inches above the ground.

47 (3) Using direct boring or hand-trenching where it is necessary to trench in the root protection zone. If
48 possible an irrigation contractor shall dig trenches in a line perpendicular to the tree trunk, but
49 maintain a distance from the trunk that is at least one-half feet for each inch of tree diameter at a height
50 of four feet six inches above the ground. When direct boring, an irrigation contractor shall bore to a
51 minimum of 36 inches. An irrigation contractor shall not bore within five feet of a tree trunk. An
52 irrigation contractor shall use hand trenching techniques that dig a trench without damaging roots
53 having a diameter of one-half inch or more.

54 (4) Avoiding placing sprinklers in a position to directly spray water on tree trunks of mature trees by
55 placing them no closer to a tree than one-third of the sprinkler spray radius.

1 (o) An irrigation contractor shall use the appropriate size American Wire Gauge ("AWG") wire, as noted by the
2 manufacturer, to operate a valve.

3 (p) An irrigation contractor shall:

4 (1) Place control wires along the same line and along side of the main line;

5 (2) Allow slack in the wiring; and

6 (3) Bundle an expansion coil for all wires at each valve location.

7 (q) An irrigation contractor shall indicate common wiring (wire that runs through the entire circuit of valves) by using a
8 different colored wire from all other wire connections.

9 (r) An irrigation contractor shall provide additional wire along the irrigation wire path for future expansion or
10 replacement of damaged wires.

11 (s) An irrigation contractor shall use valve boxes that are large enough to allow for easy maintenance of the valve housed
12 inside. Valve boxes shall be at least 10 inches in diameter for both manual and automatic valves.

13 (t) An irrigation contractor shall follow the manufacturer's recommendation for all wiring and grounding, including two-
14 wire control systems.

15

16 *History Note: Authority G.S. 89G-5;*
17 *Eff. August 1, 2011.*
18 *Readopted Eff. January 1, 2016.*

REQUEST FOR TECHNICAL CHANGE

AGENCY: Irrigation Contractor's Licensing Board

RULE CITATION: 21 NCAC 23 .0505

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In reviewing these rules, the staff determined that the following technical changes need to be made. Approval of any rule is contingent upon making technical changes as set forth in G.S. 150B-21.10.

Line 6-9 – Paragraph (b) appears to forbid trenching across established root systems, while Paragraph (c) appears to allow such trenching if “necessary.” Is (c) an exception to (b)? How would a contractor determine such trenching is “necessary”?

Line 9 – How can a trench be perpendicular to the tree trunk? Isn't a trunk essentially circular? What does this mean?

Line 18 – insert a comma after “structure”

Line 20 – Does your regulated public understand what this line means? Is “swing joint” defined or described in your rules?

Please retype the rule accordingly and resubmit it to our office at 1711 New Hope Church Road, Raleigh, North Carolina 27609.

Jason S. Thomas
Commission Counsel
Date submitted to agency: December 1, 2015

1 21NCAC 23 .0505 is re-adopted without substantive changes as published in 30:03 NCR

2
3 **21 NCAC 23 .0505 TRENCHING AND PIPING**

4 (a) All portions of an irrigation system that do not meet the standards in this Rule shall be noted on the record

5 drawing.

6 (b) An irrigation contractor shall protect the root systems of the trees on the site by not trenching across the

7 established root systems of existing trees and shrubs.

8 (c) When the irrigation contractor finds that it is necessary to trench into the root zone of an established plant,

9 trenching shall be done so that the trench is at a right angle to the base of the tree or shrub.

10 (d) An irrigation contractor shall cut damaged roots cleanly at right angles.

11 (e) Piping in irrigation systems shall be designed and installed so that the flow of water in the pipe will not exceed a

12 velocity of five feet per second for polyvinyl chloride (PVC), polyethylene (PE), and high density polyethylene

13 (HDPE) pipe and seven feet per second for metal pipe.

14 (f) The main line and lateral line piping shall be installed to provide a minimum of 12 inches between the top of the

15 pipe and the natural grade.

16 (g) The bottom of the trench shall be smooth and provide a flat bed on which to rest the pipe.

17 (h) The irrigation contractor shall clean backfill material of any debris that may damage the pipe.

18 (i) If a utility, man-made structure or roots create an unavoidable obstacle that makes the 12 inch depth coverage

19 requirement impractical, the piping shall be installed inside a larger section of pipe for added protection.

20 (j) When swing joints are used, the depth of the pipe shall allow the swing joint to operate as designed.

21 (k) All trenches and holes created during installation of an irrigation system shall be backfilled and compacted to

22 the final grade. The trench shall be compacted in lifts no greater than six inches to insure proper compaction.

23 (l) All new irrigation systems that are installed using PVC shall be prepared according to manufacturer's

24 recommendations prior to connection.

25 (m) When the irrigation contractor uses PR 200 pipe, the manufacturer's directions shall be followed.

26 (n) The irrigation contractor shall use the manufacturer's approved lubricant when assembling Bell and Gasket Pipe

27 and Fittings.

28 (o) The irrigation contractor shall use Teflon tape on all threaded fittings, wrapping the tape three times to insure a

29 proper seal.

30 (p) When the irrigation system uses reclaimed water, the irrigation contractor shall use purple pipe or mark the pipe

31 with purple tape placed above all piping in the system. Tape shall be within six inches of the top of the pipe. The

32 irrigation contractor shall use purple valve box covers and purple quick coupler flaps and place an eight inch by

33 eight inch sign with purple background stating "RECLAIMED WATER-DO NOT DRINK," and "AGUA DE

34 RECUPERION-NO BEBER."

35
36 *History Note: Authority G.S. 89G-5(15); 89G-5(16);*
37 *Eff. July 1, 2011;*
38 *Amended Eff. April 1, 2015.*
39 *Readopted Eff. January 1, 2016*