This discussion of the latest ANSI A300 standard for tree risk assessment will help arborists (consulting, city) develop specifications for their urban tree management program or type of business...

Urban Forestry South is the Southern Region’s urban & community forestry Technology Transfer Center which supports U&CF programs through state agencies and municipalities.

In this presentation I will review the ANSI system briefly and then discuss in detail the development of a tree risk specification that meets the newest ANSI standard for tree risk.

How many of you have developed written tree care specifications based on any of the ANSI A300 standards?

Written specifications, based on an industry standard, should provide better contract compliance and reduce the chance for misinterpretation of results (i.e. the written reports).

ANSI (American National Standards Institute) accredits organizations to develop voluntary standards for their industry or profession.

TCIA is the accrediting organization for arboriculture and organizes the (ANSI Standards Committee) ASC A300 committee with representatives from a broad and diverse group of industrial and governmental organizations.
Managing the Fear Factor: ANSI A300 Tree Risk Standard

Arboriculture Standards

- Part 2: Soil Management (2011)
- Part 3: Supplemental Support Systems
- Part 4: Lightning Protection Systems
- Part 5: Management
- Part 6: Transplanting
- Part 7: Integrated Vegetation Management
- Part 8: Root & Root Zone Management
- Part 9: Tree Risk Management (2011)
- Part 10: Integrated Pest Management
- Part 11: Urban Forest Products

Standards vs Specifications

- Standards are performance standards
- NOT used as job specifications
- Job specifications should be clearly stated and detailed and contain measurable criteria
- Writing specifications can be simple or complex
- written in a format that suits your company/job
- specifications consist of two sections
  - general
  - detailed
- Section 1.2 “for developing written specifications”
- Used by:
  - federal, state, municipal, and private entities

TCIA: Tree Risk Standard

Visit the TCIA website (http://www.treecareindustry.org/code/gov_standards_a300.htm) to view summaries of all current arboricultural standards and links to specification guides.
The International Society of Arboriculture (ISA) has prepared Best Management Practices (BMPs) that correspond to most ANSI A300 standards for arboriculture.

Any questions or comments from this quick introduction to ANSI and arboricultural standards?

The “standard” reviews the ANSI system and introduces the tree risk standard (Part 9).

Safety, other standards that apply, and definitions are presented.
Part 9 Risk Assessment
1. Tree Structure Assessment Practices
2. Levels of Assessment
3. Target Identification
4. Analysis & Reporting
5. Owner Determination

The basic format for a specification.

Risk Standard - Outline
• Tree Structure Assessment Practices
  • Objective (of specifications)
  • context
  • intended use
  • scope of work
  • General (indicates who is qualified)
  • Scope of Work
    • tree location or selection criteria
    • level and details of the risk assessment
    • type of report
    • timeframe for reporting (when)
    • report presentation (who, where)
    • mitigation

The “standard” then outlines the specific requirements for the risk assessment specification.

Risk Standard - Outline
• Level 1
  • limited visual assessment
  • access difficult or not safe
  • on foot, vehicle “drive by”, or aerial (airplane)

• Level 2
  • 360°
    • ground-based visual
      • crown, trunk, basal (trunk flare)
      • above ground roots
      • site conditions
    • hand tools may be used (not required)
    • identify structural defects (indicating conditions)

The standard defines three distinct levels of assessment that may be used by a qualified arborist.

The increasing levels (1 to 3) require closer and more detailed assessments.
Level 3 requires the most advanced techniques (possibly multiple) and should result in the most accurate of assessments (i.e. lower chance of missing significant defects and their associated risk).

I think “lean assessment” and “evaluation of target” are components of Level 1 and 2 (i.e. not unique here at Level 3). Lean assessment as discussed at the presentation (A. Saunders, A-CC) may be referring to repetitive inspections over time to assess change in lean.

Sounding and drilling (i.e. small diameter bits) may be a common techniques for Level 2. Remember, Level 2 does not preclude use of any of these techniques. The standard outline includes the method for determining the target and details on data analysis and reporting.

This includes a requirement “risk advisory” when mitigation does NOT call for removal, and “residual risk” for all mitigation recommendations.

The final element of the standard is the statement of owner responsibilities (i.e. determination).
Part 9 Risk Assessment
1. Tree Structure Assessment Practices
2. Levels of Assessment
3. Target Identification
4. Analysis & Reporting
5. Owner Determination

Basic structure reviewed.

Any questions or comments from your introduction to the “standard’s” components?

Now we will look at a specific tree risk specification developed to the “standard” for the Urban Forest Strike Teams (UFST). UFST is a program of the Southern Group of State Foresters (SGSF) in the southern region (USDA FS Region 8).

UFST are qualified, experienced, and trained Certified Arborists that make tree risk assessments on trees damaged by storms (i.e. hurricanes, ice storms).

General section with:

- Title/Intent (line 1)
- Statement of applicability (lines 2-3)
- Purpose (lines 4-6)
- Definitions (lines 7-21)

Note: In the slide, document line numbers are on the left.
UFST (Urban Forest Strike Team, SGSF in the southern region).

General section (con’t) with:

- Organizational context (who is involved and under what circumstances) (lines 22-31)
- Tree risk assessment objectives (lines 32-36)
- Professional credentials of the arborists (lines 37-43)

Note: In the slide, ANSI A300 (Part 9)-2011 Tree Risk Assessment paragraph numbers are on the right (in bold).

UFST (Urban Forest Strike Team, SGSF in the southern region).

Scope of work: (starting line 44)

- Identified trees (lines 45-46)
- Boundaries and conditions (lines 47-50)
- Special statement regarding "other trees" (lines 51-52)
- Assessment protocol (lines 53-59)
- Mitigation recommendations are required (line 60)

UFST (Urban Forest Strike Team, SGSF in the southern region).

Levels of assessment: (starting line 61)

- Statement of applicability (lines 62-63)
- Level 1 (lines 64-72)
- Level 2 (lines 73-83)
- Tools required/permitted (lines 84-86)
UFST (Urban Forest Strike Team, SGSF in the southern region).

Standard components:

- Target identification (lines 87-91)
- Analysis & reporting (lines 92-97)
- Written report (lines 98-105)

**Notes:** The risk advisories required by the standard are shown here as embedded in the “Written report”, but may be better served if extracted to a separate block.

Also note that this risk advisory statement is NOT properly worded in the example.

Better wording may be:

**Risk advisories [93.6.2.1.1]**

Regardless of tree care action recommended or taken (except removal), some residual tree risk will remain following mitigation. Only when the tree is removed will all potential structure and stability concerns associated with the tree be eliminated.

UFST (Urban Forest Strike Team, SGSF in the southern region).

Closing statements:

- Owner determination (responsibilities) (lines 106-108)
- Literature cited (lines 109-115)
Any questions or comments about this risk specification?

A “generic” tree risk assessment specification (NOT to be copied) for municipalities that are requesting bids and/or contracting for tree risk assessments, or for consulting arborists that are providing this professional service for clients.

Consult the ANSI A300 (Part 9)-2011 Tree Risk Assessment standard and your legal counsel when developing risk specifications. Do NOT copy this example risk specification verbatim.

General section with:

- Title (line 1)
- Statement of applicability (lines 2-3)
- Purpose (lines 5-8)
- Definitions (lines 9-22) – add definitions as needed for your RFB or contract.
A “generic” tree risk assessment specification (NOT to be copied) for municipalities that are requesting bids and/or contracting for tree risk assessments, or for consulting arborists that are providing this professional service for clients.

Consult the ANSI A300 (Part 9)-2011 Tree Risk Assessment standard and your legal counsel when developing risk specifications.

General section (con’t) with:

- Organizational context (who is involved and under what circumstances) (lines 24-33)
- Tree risk assessment objectives (lines 34-38)
- Professional credentials of the arborists (lines 39-52)

A “generic” tree risk assessment specification (NOT to be copied) for municipalities that are requesting bids and/or contracting for tree risk assessments, or for consulting arborists that are providing this professional service for clients.

Consult the ANSI A300 (Part 9)-2011 Tree Risk Assessment standard and your legal counsel when developing risk specifications.

Scope of work: (starting line 53)

- Identified trees (lines 54-55)
- Boundaries and conditions (lines 57-61)
- Assessment protocol (lines 62-69)
- Mitigation recommendations are required (line 70)
A “generic” tree risk assessment specification (NOT to be copied) for municipalities that are requesting bids and/or contracting for tree risk assessments, or for consulting arborists that are providing this professional service for clients.

Consult the ANSI A300 (Part 9)-2011 Tree Risk Assessment standard and your legal counsel when developing risk specifications.

Levels of assessment: (starting line 72)

- Statement of applicability (line 73)
- Level 1 (lines 74-81)
- Level 2 (lines 82-95)
- Tools required/permited (lines 96-98)

A “generic” tree risk assessment specification (NOT to be copied) for municipalities that are requesting bids and/or contracting for tree risk assessments, or for consulting arborists that are providing this professional service for clients.

Consult the ANSI A300 (Part 9)-2011 Tree Risk Assessment standard and your legal counsel when developing risk specifications.

Levels of assessment: (starting line 72)

- Level 3 (lines 100-122)
A “generic” tree risk assessment specification (NOT to be copied) for municipalities that are requesting bids and/or contracting for tree risk assessments, or for consulting arborists that are providing this professional service for clients.

Consult the ANSI A300 (Part 9)-2011 Tree Risk Assessment standard and your legal counsel when developing risk specifications.

**Standard components:**

- Target identification (lines 124-127)
- Analysis & reporting (lines 128-131)
- Written report (lines 132-136)

**Closing statements:**

- Risk advisories (lines 137-140)
- Owner determination (lines 141-144)
- Literature cited (lines 145-49) [Note: Not required by Standard]

Also reference any applicable contracts, RFPs, RFBs, or required report templates.

A “generic” tree risk assessment specification (NOT to be copied) for municipalities that are requesting bids and/or contracting for tree risk assessments, or for consulting arborists that are providing this professional service for clients.

Consult the ANSI A300 (Part 9)-2011 Tree Risk Assessment standard and your legal counsel when developing risk specifications. Do NOT copy this example risk specification verbatim.

Any questions or comments about this example risk specification or the ANSI A300 (Part 9)-2011 Tree Risk Assessment standard?

A PDF of this presentation will be at www.UrbanForestrySouth.org.

“Quick Search” with ‘ANSI Risk’ (no quotes).