

Existing language in black.

Code language adopted 11/20/2002 is in blue.

Technical amendments in green for additions and red for deletions

Chapter 22 HEIGHT STANDARDS

22.7 List of Findings: The findings in this chapter are as follows

- (1) When viewed from major arterials, scenic turnouts, public recreation areas or the waters of Lake Tahoe, from a distance of 300 feet, the additional height will not cause a building to extend above the forest canopy, when present, or a ridgeline. For height greater than that set forth in Table A for a 5:12 pitch, the additional height shall not increase the visual magnitude beyond that permitted for structures in the shoreland as set forth in ~~Subparagraph Section 30.15.EG, Additional Visual Magnitude, or Appendix F, Visual Assessment Tool, of the Design Review Guidelines~~ Subparagraph 30.15.C(4)(b), Option 2 Visual Magnitude System or Subparagraph 30.15.C(5)(b), Option 2 Visual Magnitude System.

Chapter 30

DESIGN STANDARDS

Chapter Contents

- 30.0 Purpose
- 30.1 Applicability
- 30.2 Design Review Guidelines
- 30.3 Scenic Quality Improvement Program
- 30.4 Substitution Of Standards And Guidelines
- 30.5 Site Design Standards
- 30.6 Building Design Standards
- 30.7 Landscaping Standards
- 30.8 Exterior Lighting Standards
- 30.9 Water Conservation Standards
- 30.10 Standards For Combustion Appliances
- 30.11 Outdoor Advertising
- 30.12 Scenic Quality Standards
- 30.13 Establishment of Scenic Highway Corridors
- 30.14 Soil and Vegetation Protection Standards
- 30.15 [Scenic Quality Review in the Shoreland](#)

30.1 Applicability: All projects shall comply with the standards set forth in this chapter, except as noted below. In addition, exempt activities, as defined in Chapter 4, shall comply with sections [30.6](#), [30.9](#) and [30.10](#). [Substitute design standards shall not apply to the review procedures and standards for projects in the shoreland.](#) Appropriate provisions of the Design Review Guidelines and Scenic Quality Improvement Program may be considered as conditions of project approval.



30.6 Building Design Standards: In accordance with section 30.1, the following building design standards shall apply:

30.6.A General Standards: The general standards are:

- (1) The architectural design of a project shall include elements that screen from public view all external mechanical equipment, including refuse enclosures, electrical transformer pads and vaults, satellite receiving disks, communication equipment, and utility hardware on roofs, buildings or the ground.
- (2) Roofs, including mechanical equipment and skylights shall be constructed of nonglare finishes [and earthtone colors](#) that minimize reflectivity. [For this subparagraph, non-glare earthtone colors are defined as Munsell® Colors set forth in Appendix G, TRPA Approved Earthtone Colors, of the Design Review Guidelines, that have a value and chroma of 0-4.](#)

- (3) For all structures visible from the Scenic Threshold Travel Routes and from Public Recreation Area and Bicycle Trails identified in the 1993 Lake Tahoe Basin Scenic Resource Evaluation, subdued colors of earthtone ranges shall be used for the primary color of structures. Colors shall be within a range of natural colors that blend, rather than contrast, with the existing backdrop vegetation and soils color. For this subparagraph, earthtone colors shall be medium to dark and shall meet the Munsell® Colors set forth in Appendix G, TRPA Approved Earthtone Colors, of the Design Review Guidelines. TRPA may grant exceptions to this provision pursuant to Section 29.6, for scenic roadway corridors designated as urban, for unique situations such as site characteristics, or as set forth in Section 53.10. Structures in the shoreland that were constructed prior to January 1, 1950 may maintain their historic colors when doing exempt maintenance and repair.



30.12 Scenic Quality Standards: All projects and activities shall comply with the following standards:



30.12.B Roadway and Shoreline Unit Travel Routes: The project shall not cause a decrease in the 1982 roadway or shoreline travel route ratings as shown in Tables 13-6 and 13-7, respectively, of the Study Report for the Establishment of Environmental Threshold Carrying Capacities, October 1982. The criteria for rating travel routes as identified in the study report cited herein and as further explained in the report entitled A Scenic Analysis Of Principle Travel Routes In The Lake Tahoe Region, 1970, shall be used to determine if a project will cause a decrease in the numerical rating. For projects in the shoreland, Section 30.15 shall be used to determine if it will contribute to a decrease in the numerical rating for a shoreline travel route rating.



30.15 Scenic Quality Review in the Shoreland: To make the scenic findings required by Subsection 30.12.B, all projects within the shoreland of any Shoreline Threshold Travel Route shall be reviewed for compliance with the standards set forth below except for projects within marinas with adopted master plans and certified EISs, or structures designated as historic by TRPA, pursuant to Chapter 29.

30.15.A Definitions: The following terms, as used in Section 30.15 shall be defined as:

- (1) Lakefront Façade: Surface area of the lakefront elevation(s) for all primary and accessory buildings and other structures, with visible area for a given project area within the shoreland.
- (2) Visible Area: Surface area of all structures in the shoreland visible from 300 feet offshore and generally perpendicular to and centered on the project area. Surface area blocked by man-made structures in the shorezone shall count as visible area.
- (3) Visual Breaks: The application of landscaping to man-made structures that results in reducing the contrast and breaking the

overall visible area of a structure's façade. This may be achieved by screening with vegetation, rocks, soil, and other natural appearing materials or by using such techniques between detached structures.

- (4) Visible Structure: A structure with visible area.

30.15.B Review Process: The applicant shall complete a scenic assessment when applying for any activity requiring a TRPA permit; an applicant may apply for a scenic assessment at anytime to document the baseline condition. Review and mitigation of scenic impacts shall be based on ~~the matrix in Subparagraph (2)~~ Subsection 30.15.C below.

- (1) Scenic Assessment: A scenic assessment shall be required prior to submittal of a project application. The scenic assessment will establish a baseline scenic condition for all following scenic impact analyses. The baseline shall be the existing condition at the time of the first scenic assessment, unless the site is the subject of an existing TRPA approval, by litigation settlement or otherwise, that contains a scenic analysis, in which case the approved scenic analysis shall be the baseline. For purposes of this Section, un-built projects with an active permit shall be considered as existing.
- (a) Description of existing scenic conditions in the project area including, but not limited to, structure color and height, existing visible mass from the Lake, types and areas of materials of existing structures, and identification of needed scenic BMPs.
- (b) Identify existing vegetation types, location, size, and height.
- (c) Photographic inventory of the site project area from 300' and one quarter mile offshore, with at least one photo from center and perpendicular to the project area, and photos of onsite existing conditions.

30.15.C Levels of Scenic Mitigation: The following levels of scenic mitigation shall be required based on the level of the activity or project:

- (1) Level 1: All projects and activities on existing visible structures in the shoreland that are considered repair or maintenance. This includes exact in-kind replacement. There are no mitigation requirements required except as noted in Level 2.
- (2) Level 2: All projects and activities on existing visible structures in the shoreland that are considered painting, re-siding, re-roofing or similar activities that affect the color of the structure. The mitigation requirements for this level shall be the color requirements set forth in Subsection 30.6.A
- (3) Level 3: All projects on existing visible structures in the shoreland altering or increasing the lakefront façade area ~~of an existing visible structure~~ 20 percent or less and the result is 1,500 square feet or less of lakefront façade or non-repair projects on structures adjacent and lakeward of the shoreland. The mitigation requirements for this level shall be the implementation of scenic BMPs in the shoreland.

The BMPs shall bring the project area into conformance with a minimum contrast rating score of 21 except where:

- (a) it is physically impossible to attain a score of 21 through application of scenic BMPs; or
 - (b) the cost of the scenic BMPs required to increase the baseline contrast score to 21 exceeds ten percent of the cost of the project; and
 - (c) if the project is not required to bring the project area into conformance as a result of subparagraphs (a) and (b) above, the applicant shall attain the highest possible score.
- (4) Level 4: All projects involving existing visible structures in the shoreland ~~which altering or increasing the lakefront façade of an existing visible structure and~~ where the altered/added area is 20 percent or less of the existing façade and the result is more than 1,500 square feet of total lake front façade, or where the altered/added area is greater than 20 percent but equal to or less than 50% of the existing lakefront façade, or where the project is a new accessory structure. The mitigation requirements for this level shall be as set forth in Option 1 or Option 2 at the applicant's choice.
- (a) Option 1 Basic Review: The Projects shall meet the following mitigation standards:
 - (i) The project area shall score a minimum of 24 points based on the Contrast Rating System; except where:
 - (A) it is physically impossible to attain a score of 24 through application of scenic BMPs; or
 - (B) the cost of the scenic BMPs required to increase the baseline contrast score to 24 exceeds twenty percent of the cost of the project; and
 - (C) if the project is not required to bring the project area into conformance as a result of subparagraphs ~~(iA)~~ and ~~(iiB)~~ above, the applicant shall attain the highest possible score.
 - (ii) The ~~resulting~~ allowable visible area square footage in the project area shall not exceed 2200 sq. ft. The visible area square footage may be increased by 7.5% for each additional 10 ft. of linear lake frontage over 100 ft. Existing structures exceeding the 2200 (or as increased by lake frontage) visible square feet standard shall mitigate any additional area square footage on a 1:1.5 square foot basis.
 - (iii) A minimum building setback from the backshore boundary line shall be 10% of the lot depth not to exceed 20 feet. Each side yard setback shall be 10% of the lot width or the setback established by the local jurisdiction whichever is greater. Existing

structures shall not be required to conform to setback standards. No expansion of structures shall be allowed in the setback area. At grade decks, erosion control structures, stairs, and similar structures are permissible in the setback at the allowed land coverage.

- (iv) The height standard, including but not limited to the height limitations, findings, and regulations set forth in Chapter 22 for structures shall apply.
 - (v) Visual breaks shall be required on all structures. At a minimum, breaks shall be spaced along the lakefront façade to provide approximately 250 square feet screening for every 1000 square feet of lakefront facade. A break should extend vertically to two-thirds of the structure height and horizontally to approximately 10 feet. TRPA may approve equal or superior alternatives to this standard.
- (b) Option 2 Visual Magnitude System: A project must score a minimum contrast point score for the desired square footage of visual magnitude based on Appendix FH, Visual Assessment Tool, of the Design Review Guidelines or if non-complying, shall implement Scenic BMPs as required in Option 1 in (4)(a) above; and:
- (i) The visible façade square footage may be increased by 7.5% for each additional 10 ft. of linear Lake frontage over 100 ft;
 - (ii) Visual breaks shall be required on all structures. At a minimum, breaks shall be spaced along the lakefront façade to provide approximately 250 square feet screening for every 1000 square feet of lakefront facade. A break should extend vertically to two-thirds of the structure height and approximately 10 linear feet horizontally. TRPA may approve equal or superior alternatives to this standard; and
 - (iii) Existing projects not complying with visual magnitude shall implement visual breaks and improvements that demonstrate a percentage toward attainment determined by the cost of the project over the replacement cost of the structure.
- (5) Level 5: All projects in the shoreland altering or increasing the lakefront façade area of an existing visible structure more than 50 percent or proposing a new visible structure exclusive of new accessory structures. The mitigation requirements for this level shall be as set forth in Option 1 or Option 2, at the applicant's choice.
- (a) Option 1 Basic Review: As a result of the project, the project area must score a minimum 28 points based on the Contrast Rating System. The projects shall meet the following mitigation standards:

- (i) The ~~resulting~~ allowable visible area square footage in the project area shall not exceed 2200 sq. ft. The visible area square footage may be increased by 7.5% for each additional 10 ft. of linear lake frontage over 100 ft. Existing structures exceeding the 2200 (or as increased by lake frontage) visible square feet standard shall mitigate any additional area square footage on a 1:2 square foot basis.
 - (ii) A minimum building setback from the backshore boundary line shall be 10% of the lot depth not to exceed 20 feet. Each side yard setback shall be 10% of the lot width or the setback established by the local jurisdiction, whichever is greater. Existing structures shall not be required to conform to setback standards unless the proposed modification makes it feasible. No expansion of structures shall be allowed in the setback area. At grade decks, erosion control structures, stairs, and similar structures are permissible in the setback at the allowed land coverage.
 - (iii) The height standard, including but not limited to the height limitations, findings, and regulations set forth in Chapter 22 for structures shall apply.
 - (iv) Visual breaks shall be required on all structures. At a minimum, breaks shall be spaced along the lakefront façade to provide approximately 250 square feet screening for every 1000 square feet of lakefront facade. A break should extend vertically to two-thirds of the structure height and approximately 10 linear feet horizontally. TRPA may approve equal or superior alternatives to this standard.
- (b) Option 2 Visual Magnitude System: A project shall attain the minimum contrast point score for the desired square footage of visual magnitude based on Appendix ~~F~~H, Visual Assessment Tool, of the Design Review Guidelines or if non-complying, shall implement Scenic BMPs as required in Option 1 in 5(a) above and:
- (i) The visible façade square footage may be increased by 7.5% for each additional 10 feet of linear lake frontage over 100 ft;
 - (ii) Visual breaks shall be required on all structures. At a minimum, breaks shall be spaced along the lakefront façade to provide approximately 250 square feet screening for every 1000 square feet of lakefront facade. A break should extend vertically to two-thirds of the structure height and horizontally to approximately 10 linear feet. TRPA may approve equal or superior alternatives to this standard; and

(iii) Existing projects not complying with visual magnitude shall implement visual breaks and improvements that demonstrate a percentage toward attainment determined by the cost of the project over the replacement cost of the structure. In no case shall the total visible façade square footage exceed the maximum set forth by the visual magnitude system.

(6) Level 6: All projects involving new or existing structures in the shoreland that are visible from the Lake and that qualify as public health and safety projects or Environmental Improvement Program projects. The mitigation requirements for this level shall be established on a case-by-case basis. Projects whose primary purpose is implementation of water quality or scenic BMPs are exempt from mitigation requirements.

30.15.D General Standards of Review: The following general standards of review shall apply to projects reviewed pursuant to this Section:

- (1) Prohibition on Segmenting: Projects may not be segmented in order to qualify for a lower level of mitigation requirements.
- (2) Calculation of Cost and Value: Whenever required by this Section, cost estimates and replacement values shall be based on Marshall Swift calculations.
- (3) Fire Protection: The applicant shall not submit vegetative screening inconsistent with local fire protection standards. As used in this Section, the term “physical impossibility” shall not include inconsistency with local fire protection standards.

30.15.E Independent Review: If there is a disagreement in the application of the standards of this section, the applicant or TRPA staff may elect to pursue the following independent review option:

(1) Third Party Expert Review: In the event ~~there is a disagreement in an applicant disagrees with TRPA's~~ review of a proposed project, ~~the applicant may initiate~~ a third party expert review consistent with the process outlined in subparagraphs (i) through (iii) may be initiated. The ~~applicant~~ initiator shall fund the review and the third party expert review shall use the same methodology in the Visual Assessment Tool established in Appendix F of the Design Review Guidelines.

- (a) Third Party Expert: TRPA shall maintain a list of scenic experts recognized as possessing the necessary qualifications to evaluate impacts to the scenic resources threshold. An expert shall be selected from the list randomly, as long as that expert did not consult on or participate in the design of the proposed project.
- (b) The Third Party Expert shall prepare an analysis of the proposed project. The report shall include;
 - (i) A description of the proposed project; and

- (ii) An analysis of the proposed project's consistency with the standards set forth in this ordinance; and
 - (iii) Written findings quantifying the project's impacts and any mitigation, if required.
 - (c) Use of Third Party Report: The Executive Director shall review the third party expert report and may approve, deny, or require modifications to the project. The expert's findings shall be included in the review of the project.
- (2) Scenic Panel Review: Until November 20, 2004, the applicant or TRPA may elect to initiate a Scenic Panel Review if there is a disagreement in the determination of mitigation required pursuant to this SubSection. The cost of the panel shall be paid by the initiator. Panels initiated during this period shall continue until the completion of the panel's review process. An expert panel of three people shall prepare a scenic analysis of the project and its impact including foreseeable reasonable activities on the entire scenic unit. The panel shall recommend appropriate conditions of approval necessary to make the required scenic attainment findings.
 - (a) TRPA shall select a panel member, the applicant shall select a panel member and the two panel members shall select a third member to review the project.
 - (b) The analysis may include other professionally accepted methods of evaluating scenic impacts. This Subparagraph may be extended beyond the two-year limitation pursuant to the performance review required in Subsection 30.15.F.
 - (c) Use of Panel Report: The Executive Director shall review the scenic panel report and may approve, deny, or require modifications to the project. The panel's findings shall be included in the review of the project.
- 30.15.F Marina Master Plans: In developing and approving marina master plans pursuant to Chapter 16, the applicant shall use the contrast rating/visual magnitude system outlined in Appendix F~~H~~G, Visual Assessment Tool, of the Design Review Guidelines or an equal or superior method of evaluating scenic impacts. All significant scenic impacts shall be identified in the environmental document using an approved scenic impact analysis methodology and mitigation measures shall be proposed and incorporated into the master plan to ensure consistency with attainment and maintenance of environmental thresholds.
- 30.15.G Additional Visual Magnitude: TRPA may permit additional square footage of visual magnitude with visual breaks for a given contrast rating in Appendix F~~H~~G, Visual Assessment Tool, of the Design Review Guidelines as follows:
 - (1) Public Outdoor Recreation: For public outdoor recreation uses that are subject to Subsection 33.6.C, PAOT allocations, additional square footage of visual magnitude may be permitted if TRPA finds that:

- (a) The project is a necessary part of a long range plan for public outdoor recreation; and
 - (b) The project is consistent with the Recreation Element of the Regional Plan; and,
 - (c) There is no reasonable alternative which would avoid or reduce the extent of visual magnitude; and
 - (d) The additional square footage is mitigated pursuant to subparagraph [30.15.H\(6\)](#) below; or
 - (e) If existing structures in the project area are in excess of that permitted by Option 2 in Levels 4 and Levels 5, the additional square footage permissible is a result of a reduction in the visual magnitude consistent with the following requirements. Existing non-complying projects shall implement improvements that results in a contrast score of 25 or demonstrate a percentage toward attainment determined by the cost of the project over the replacement cost of the structures not to exceed 50 percent, whichever is greater.
- (2) Public Service Facilities: For public service uses, additional square footage of visual magnitude may be permitted if TRPA finds that:
- (a) The project is necessary for public health, safety or environmental protection; and
 - (b) There is no reasonable alternative, which would avoid or reduce the extent of visual magnitude; and,
 - (c) The additional square footage is mitigated pursuant to subparagraph [30.15.H](#) (6) below; or
 - (d) If existing structures in the project area are in excess of that permitted by Option 2 in Levels 4 and Levels 5, the additional square footage permissible is a result of a reduction in the visual magnitude consistent with the following requirements. Existing non-complying projects shall implement improvements that result in a contrast score of 25 or demonstrate a percentage toward attainment determined by the cost of the project over the replacement cost of the structures not to exceed 50 percent, whichever is greater.
- (3) Tourist Accommodation and Commercial Projects in Commercial and Public Service Plan Areas and Tourist Accommodation Plan Areas: Additional square footage of visual magnitude may be permitted for projects in Commercial and Public Service Plan Areas, if TRPA finds that:
- (a) The additional square footage is necessary as the use customarily requires increased square footage of lakefront façade than that set forth in Levels 4 and 5; and
 - (b) There is no reasonable alternative, which would avoid or reduce the extent of visual magnitude; and,

- (c) The additional square footage is mitigated pursuant to subparagraph (6) below; or
 - (d) If existing structures in the project area are in excess of that permitted by Option 2 in Levels 4 and Levels 5, the additional square footage permissible is a result of a reduction in the visual magnitude consistent with the following requirements. Existing non-complying projects shall implement improvements that result in a contrast score of 25 or demonstrate a percentage toward attainment determined by the cost of the project over the replacement cost of the structures not to exceed 50 percent, whichever is greater.
- (4) Residential Uses Other Than Single Family Dwelling: Additional square footage of visual magnitude may be permitted for projects, if TRPA finds that:
- (a) The additional square footage is necessary as the use customarily requires increased square footage of lakefront façade than that set forth in Levels 4 and 5; and
 - (b) There is no reasonable alternative, which would avoid or reduce the extent of visual magnitude; and,
 - (c) The additional square footage is mitigated pursuant to subparagraph (6) below; or
 - (d) If existing structures in the project area are in excess of that permitted by Option 2 in Levels 4 and Levels 5, the additional square footage permissible is a result of a reduction in the visual magnitude consistent with the following requirements. Existing non-complying projects shall implement improvements that result in a contrast score of 25 or demonstrate a percentage toward attainment determined by the cost of the project over the replacement cost of the structures not to exceed 50 percent, whichever is greater.

30.15.H Transfer of Scenic Mitigation Credits (Interim System): Until a permanent scenic mitigation credit system is adopted, certain scenic impacts may be mitigated outside the shoreland as follows:

- (1) The mitigation source is the adjacent shorezone project area or other shoreland parcels within the same scenic unit.
- (2) Project mitigation requirements shall utilize the Visual Magnitude System outlined in Appendix F, Visual Assessment Tool, of the Design Review Guidelines to calculate the square footage mitigation requirement or mitigation may be determined by the full panel review process.
- (3) Mitigation in attainment areas shall be on a one-to-one basis and on a one-to-one and a half basis in non-attainment areas.
- (4) All structures in the shoreland, both on the receiving and sending project areas, must have implemented scenic BMPs (21 contrast score rating) to be eligible for transfer of mitigation credits.

- (5) TRPA shall require restoration securities, deed restrictions, and inspections as appropriate to assure implementation and documentation of scenic mitigation credit.
 - (6) This interim system may be utilized:
 - (a) To mitigate additional square footage associated with shorezone structures; or
 - (b) To gain additional square footage when permissible (e.g. for commercial, public service, multi-residential, etc.)
 - (7) Contributions to TRPA-approved non-profit organizations that have qualifying scenic mitigation projects may be accepted for mitigation credit, provided the mitigation credit can be quantified and tracked.
- 30.15.I Performance Review: For two years after the adoption of the Scenic Quality Review System, TRPA shall monitor the application of the system. No later than two years from the adoption of the system, TRPA shall prepare a report on the system with recommended amendments, if necessary, and present it to the TRPA Governing Board. A long-term performance review shall be included in the next applicable threshold review.

Chapter 53

SHOREZONE TOLERANCE DISTRICTS AND DEVELOPMENT STANDARDS

53.10 Design Standards Within The Shorezone: Design standards within the shorezone are as follows:

53.10.A Color: The color of structures, including fences, shall be compatible with its surroundings. Subdued colors in the earthtone and woodtone ranges shall be used for the primary color of the structure. Hues shall be within a range of natural colors that blend, rather than contrast, with the existing vegetation and earth hues. Earthtone colors are considered to be shades of reddish-brown, brown, tan, ochre, umber, sand and dark green. Colors shall be medium to dark and shall meet the Munsell® Color value as set forth in Appendix G, TRPA Approved Earthtone Colors, of the Design Review Guidelines. Structures in the shoreland that were constructed prior to January 1, 1950 may maintain their historic colors when doing exempt maintenance and repair.

53.10.B Roofs: Roofs shall be composed of nonglare earthtone or wood tone materials that minimize reflectivity. Metal roofs shall be compatible with their surroundings and composed of non-glare earthtone colors. Metal roofs colors shall meet the Munsell® Color value as set forth in Appendix G, TRPA Approved Earthtone Colors, of the Design Review Guidelines that have a value and chroma of 0-4.