



Safe Trestles

Design Competition to Create Safe, Low-Impact Access to Trestles

Phase 2 Guidelines

June 2010

Prepared for: **Phase 1 Finalists**

| Phase 2 Overview |

Start date: June 04, 2010

Submission Deadline: August 30, 2010

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Phase 1 is complete. Attached is an outline that highlights key components of **Phase 2** as well as feedback from **Phase 1**. Any changes, updates, or new information will be announced via email and posted at <http://openarchitecturenetwork.org/node/5151>.

In Phase 2, Architecture for Humanity will:

1. Coordinate communications between stakeholders and finalists.
2. Provide information and project updates as requested and as applicable.
3. Address any questions/ comments from the general public related to the project.
4. Display **Phase 1** results at US Open and potential community events throughout the summer and on the Open Architecture Network.
5. Display **Phase 1** results and announce the **Phase 2** winners at the Hurley Pro surf competition in September.

In Phase 2, Finalists should:

1. Post design progress regularly on your project page on the Open Architecture Network. These should be open for public viewing. An open and engaging design process is encouraged, and will be reviewed during judging.
2. Address any questions/ comments posted on your project page that specifically relate to design intent/ response.
3. Address questions/ comments to stakeholders and local agencies through Architecture for Humanity.
4. Develop solutions that conform to national and local building codes.



| Schedule |

<u>DATE</u>	<u>MILESTONE</u>
June 04	Design Development Begins
June 04 – June 15	Information + Question Period <ul style="list-style-type: none">▪ Finalists should formalize questions for stakeholders, jurors, etc▪ Architecture for Humanity will distribute
June 18	Meeting with Stakeholders and Finalists
June 23-28	Surf America Nationals: Surfrider will host Phase 1 exhibit <ul style="list-style-type: none">▪ at Trestles
June/ July TBD	Community Meeting/s <ul style="list-style-type: none">▪ Finalists invited to attend▪ Webcast will be made available
July 21 - 23	Design Progress Review <ul style="list-style-type: none">▪ On-line with Architecture for Humanity and stakeholders
July - Aug	Safe Trestles exhibit + display at US Open of Surfing Motel NoTell <ul style="list-style-type: none">▪ Huntington Beach
Aug 30	Phase 2 Submission Deadline
Aug 30 – Sept 06	Stakeholder Review
September	Phase 2 Winners Announced <ul style="list-style-type: none">▪ at WCT Hurley Pro event at Trestles▪ Safe Trestles exhibit + display Sept 13 - 19



| Program Requirements |

The designs should capture and enhance the essence of the experience and safety on the trail. They must prevent environmental damage, provide opportunities for educating the visitor, and appeal to the general community.

Railroad Crossing:

Designs should **include 2 schemes** for the railroad crossing:

- **Scheme A:** At-grade solutions should include crossbucks, electrical warnings, a bell, and/or a gate that drops to prevent pedestrians from crossing the tracks. Consider audio/ visual solutions that will not disturb the parks' solitude.
- **Scheme B:** Below-grade solutions should maintain a minimum 8' ceiling height. Design submissions may allow for raising the tracks by 6' to accommodate for ground water level.
 - Consider potential visual and auditory impact of elevated train and methods for intervention.

Drawings that illustrate the crossing sequence to be included in **Required Supporting Documentation**

- Diagrams
- Enlarged plans/ sections
- Note slopes, materials, and material/ surface changes

Accessibility Guidelines:

- All portions and elements of the proposal should be accessible to all users.
- Indicate 1 accessible parking spaces, and 1 van accessible space. Refer to CASP Accessibility Guidelines for more information. **See Appendix C** for a summary of these guidelines. http://www.parks.ca.gov/?page_id=21944

Educational Component:

Wayfinding, signage, literature, interactive display/s on (but not limited to):

- Interpretive viewpoints
- Natural history
- Cultural history
- Current uses
- Environmental degradation, remediation
- Waste management
- Environmentally conscious design
- Variety of use/ users

Refer to State Parks Interpretive Services Division – Workbook for Planning Interpretive Projects in California State Parks, 1997. http://www.parks.ca.gov/?page_id=25531

Material Selection:

- Durable
- Look to other precedents (parks or otherwise) for commonly used materials
- Natural/ environmentally friendly
 - Consideration to be given to local materials

Additional Facilities:

- Restroom/s
 - Currently there are 3 porta-potties at the end of the trail at the beach. An alternative, non-toxic solution and/or screen should be presented.
 - 1-3 restrooms, minimum one should be accessible
- Integrated waste receptacles
- Bicycle/ surf board racks



| Scope of Services | Outline

See the following sections for more detailed requirements.

Site and Community Involvement

1. As possible, meet on-site with stakeholders, Architecture for Humanity or establish a local contact
2. Attend community meetings throughout the summer, either in person or via webcast
3. Project Outreach

Required Presentation Materials

1. Design Book
2. Presentation Boards
3. Physical Model/s

Required Supporting Documentation

1. Site Plan/s
2. Enlarged Plans
3. Site Section/s
4. Enlarged Sections
5. Construction Details
6. Photographs - Physical Model
7. Computer generated model
8. 3-dimensional Renderings
9. Educational Component
10. Construction Materials List + Specifications
11. Construction Budget Documentation

Suggested Supporting Documentation

1. Project Video
2. Website
3. Create additional content to support your vision – innovation is a bonus!



| Scope of Services | Site and Community Involvement

1. Site Visit

Meet on-site with stakeholders, Architecture for Humanity:

- Friday June 18
- 9am – 4pm (TBD)

Establish a local contact:

- If unable to visit the site, you can opt to find a local team member (ie. engaging one of the many local entrants) who can represent your team on-site.
- Architecture for Humanity can connect you with one of the many local entrants.

2. Community Meetings

Attend community meetings throughout the summer, either in person or via webcast

- Date/s to be determined
- Work with Architecture for Humanity to develop additional community interaction.

3. Project Outreach

How can you encourage an innovative community based discussion + design?

Develop and implement design outreach strategy for community involvement and feedback

- Post all images, renderings, sketches, photographs, models, cost reports and/or text created in association with the project by uploading this information in your project node on the Open Architecture Network.
- Respond to design-related public comments/ questions.

Consider additional outreach and social media potential

- How does your project portray graphically (potential awareness/ fundraising)? Consider using logos/ graphics for your project to use for growing awareness and/ or fundraising.
- How can you use the Open Architecture Network, social media sites, and the internet as a forum for communications?



| Scope of Services | Required Presentation Materials

The **design book** and **physical model** should be mailed to Architecture for Humanity.

1. Design Book

8.5x11 portrait or A4

In color

Printed, bound, and mailed to Architecture for Humanity

Digital copies .doc + .pdf

Bound document should contain:

- **Team Information:** team name, team members, team contact, contact information for team contact
- **Design Narrative:** project name, project goals, solutions
- **Design process:** Phase 1, Phase 2 process, how has stakeholder, agency, and community feedback shaped your designs
- **Reproductions of all required deliverables:** scaled to fit
- **Construction Materials List + Budget Documentation**

2. Presentation Boards

2 minimum should contain (at a minimum):

- **Site Plan**
- **Site Section**
- **Enlarged plans/ sections of 2 crossing schemes**
- **1 Construction Detail**
- **3-d graphics**
- **Photo of model**

All vital information should be on the required (2 minimum) boards. Additional boards are acceptable.

24"x36" landscape format

Minimum 200dpi

Digital copies .jpg and .pdf

3. Physical Model

Trail, crossing, and key component/s

We are working with the stakeholders and will provide specific model requirements are forthcoming.

The models will likely fit in a constructed box with exterior dimensions of 14" x 22" x 9" and include:

Site and trail

Detail of crossing scheme

Detail of constructed portion of trail

We encourage you to build additional models



| Scope of Services | Required Supporting Documentation

All digital files must be **submitted** to the “Files” tab of your project node on the Open Architecture Network. All file names should include your Entry ID Number assigned in Phase One (e.g., 0000_presentationboard_01.pdf).

Slide Show: Include all required drawings/ photographs in the slide show. The presentation boards should be the first images.

Image format: All Required image files must be 3000 pixels x 2000 pixels (15in x 10in @ 200 DPI) in JPEG, PNG or GIF format. And the presentation board should be Landscape Format at 24in x 36in at a minimum of 200dpi.

Units + Scale: All dimensions should be in feet and inches.
Include graphic scale (in plan, section, elevation, detail) and north arrows (in plan). Orient north up.

1. Site Plan/s

- Scaled
- **Include a Scheme A + B site plan if different crossing solutions change the path’s course**

2. Enlarged Plans

- Trail start: $\frac{1}{4}'' = 1'-0''$ minimum
 - At the special events/ handicap parking area
- Trail end: $\frac{1}{4}'' = 1'-0''$ minimum
 - Where the trail meets the sand
- **Railroad Crossing Scheme A + B:** $\frac{1}{4}'' = 1'-0''$ minimum
- Restroom/s: $\frac{1}{4}'' = 1'-0''$ minimum
- Education/ overlook: $\frac{1}{4}'' = 1'-0''$ minimum
- Additional points of interest: $\frac{1}{4}'' = 1'-0''$ minimum

3. Site Section/s

- Scaled
- Cut through proposed path

4. Enlarged Sections

- Indicate required slopes and elevational information
- Trail start + end: $\frac{1}{4}'' = 1'-0''$ minimum
- **Railroad Crossing Scheme A + B:** $\frac{1}{4}'' = 1'-0''$ minimum
- Restroom/s: $\frac{1}{4}'' = 1'-0''$ minimum
- Additional points of interest: $\frac{1}{4}'' = 1'-0''$ minimum

5. Construction Details

- Through proposed assemblies and connections
- $1-\frac{1}{2}'' = 1'-0''$ minimum

6. Photographs - Physical Model

Minimum 2 photos should be included

7. Computer generated model

Digital copies .dwg or .dxf

8. 3-dimensional Renderings

Digital copies .jpg and .pdf



9. Educational Component

Design educational piece/s along the path.

Highlight exhibit points within your presentation materials.

1 minimum graphic representation of educational component.

(not limited to) wayfinding, signage, literature, interactive display/s on (but not limited to):

- Interpretive viewpoints
- Natural history
- Cultural history
- Current uses
- Environmental degradation, remediation
- Waste management
- Environmentally conscious design
- Variety of uses/ users

Refer to State Parks Interpretive Services Division – Workbook for Planning Interpretive Projects in California State Parks, 1997. http://www.parks.ca.gov/?page_id=25531

We encourage you to develop comprehensive educational material.

Contact us if you'd like to find a scientific illustrator (students and/ or faculty) to join your team.

| Scope of Services | Suggested Supporting Documentation

1. Project Video
2. Website
3. We invite innovative and creative solutions that represent your designs. How will your project stand out from the rest of the talented design teams?



| Appendix A | Phase 1 Exhibit + Stakeholder's Event



Gerard Minakawa, founder of Bamboo DNA, worked with Architecture for Humanity to design, build, and install the Safe Trestles history and semi-finalist boards display at the Nike Lowers Pro, May 04-08 at Trestles.



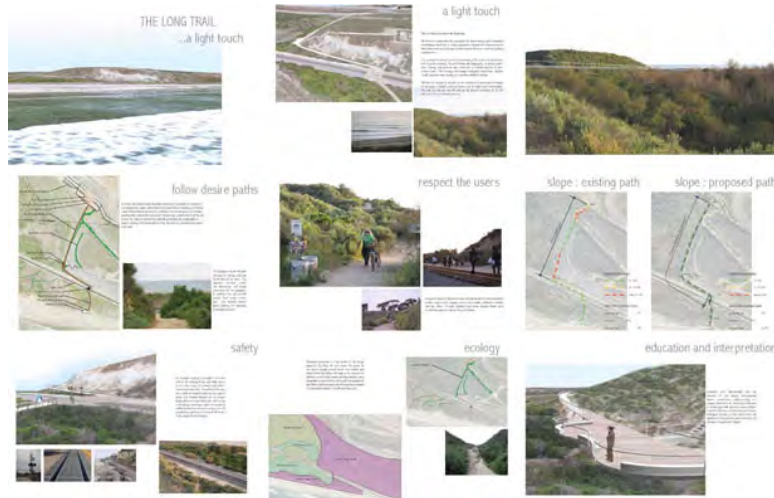
Cameron Sinclair and Steve Long are shown in front of the semi-finalists boards at the Stakeholders + Jury Event at the San Clemente Historic Cottage – May 06, 2010.



| Appendix B | Phase 1 Finalists

01_6678: The Long Trail

Team: Ken Smith Landscape Architect: WORKSHOP WEST
Irvine, CA (USA)



Key Concept/s

- Site remediation
- Habitat restoration
- Major site intervention

Crossing Type

- Over

Design Elements

- Curvilinear
- Elevated path
- Trailhead facilities

Jury Highlights

- Low-impact
- Habitat Sensitivity

04_6712: Unveiling the Natural

Team: ERGO4
Heilbronn, Baden Wuttemberg (Germany)



Key Concept/s

- Site remediation
- Habitat restoration
- Major site intervention

Crossing Type

- Below grade

Design Elements

- Curvilinear
- Elevated path
- Trailhead site information
- Trailhead facilities
- Vista points along path

Jury Highlights

- Low-impact
- Habitat Sensitivity
- Innovation
- Experiential



07_6874: Easy Dry Fit

Team: kola + kle

Berlin (Germany)



Key Concept/s

- Site remediation
- Habitat restoration
- Major site intervention

Crossing Type

- At grade

Design Elements

- Linear plan - unidirectional
- Slightly elevated path
- Integrated site information
- Beachside facilities

Jury Highlights

- Low-impact
- Habitat Sensitivity
- Educational

10_7012: The Wave

Team: CO-LAB design office

Los Angeles, CA (USA)



Key Concept/s

- Minimal site intervention

Crossing Type

- At grade

Design Elements

- Curvilinear
- Elevated path
- Integrated site information
- Beachside facilities

Jury Highlights

- Low-impact
- Habitat Sensitivity
- Innovation
- Experiential



12_7093: Natural Scheme

Team: Murphy Burnham & Buttrick Architects
New York, NY (USA)



Key Concept/s

- Site remediation
- Habitat restoration
- Major site intervention

Crossing Type

- Above grade

Design Elements

- Curvilinear
- Elevated path
- Trailhead facilities

Jury Highlights

- Low-impact
- Habitat Sensitivity

| Phase 1 | General Feedback

Community response

- Local exhibit enabled dynamic community discussion
- Opinions shared in local paper, blogs, and comments on the Open Architecture Network
- In Phase 2, the community needs more information regarding the intent, and direction of the project.
- Designs should enhance the spirit and essence of the existing experience.

Impact

- Low-impact solutions are still a main goal. This could be achieved through material selection, scale, and how the trail sits on the site.
- Portions of the trail should be at-grade when feasible.
- Solutions should incorporate elements of the existing trail and complement the natural character site.
- Consider visual/ auditory impacts of at-grade and below-grade solutions.

Educational

- The educational component is essential.
- Interpretive exhibits and viewpoints should be integrated in the overall scheme and provide information for the spectrum of visitors and locals.

Material Selection

- Consider local materials and State and Regional Park precedents.

Presentation

- Presentations will increasingly become a vital tool for communicating the design intent and story of Safe Trestles to stakeholders, agencies, and the community – many whom may be unfamiliar with reading typical architectural drawings.



| Appendix C | Summary California State Parks Accessibility Guidelines 2009

CA State Parks: Access for Visitors with Disabilities

http://www.parks.ca.gov/?page_id=21944

Natural settings are different than urban settings. The urban environment is mostly built and can be “controlled” by design, while parks are both built and nature based. In fact, people come to State Parks primarily to experience nature; consequently the built settings in the parks must be designed to fit into a natural environment without destroying the experience people come to enjoy.

The challenge for park designers, managers, rangers and maintenance staff is to understand what people of all abilities need to use the park without compromising the qualities of the natural or cultural resource. The concept of individual choice based on the desired degree of challenge must also be addressed. For example,

a trail through a redwood grove may be the desired experience. Some people want a very challenging hike through the redwoods while others just want to stroll through a beautiful natural setting. Therefore, unlike an urban pathway the trail is not merely a means of access to a place or activity; it is the place and type of experience visitors have that creates the “program” of that place.

Accessibility, as used throughout these guidelines, is defined as “the combination of various elements in a building or outdoor area, which allows access, circulation and full use of the building, facilities and programs by person with disabilities.” (CBC-202.A) While accessibility is a defined, prescriptive set of standards and measurements that do not change in content from setting to setting, the design challenge in park settings remains – basic services and experiences need to be accessible to all people with disabilities, while maintaining the intrinsic qualities of the place.

The California State Parks Accessibility Section recognizes that deviations from standards may be necessary from time to time due to the environmental conditions and unique constraints of a particular site. In these cases, the Accessibility Section should be contacted for guidance and direction at (916) 445-8949, or e-mail: access@parks.ca.gov.

Section 5: Beaches and Shores

- Designated beaches and day use areas shall be accessible. CBC-1132B.2.2
- major barrier to shore and beach use by persons with mobility impairments is the difficulty traversing sandy or loose soil.
 - Access to the edge of the beach or shore from accessible parking spaces, common use areas and support facilities.
 - Access across the beach to the water’s edge.
- For an existing “designated” beach, when a pedestrian access route is constructed to or along the edge of the beach, a beach access route shall be provided. 99AG-16.4.1.2
- The beach access route shall be located in the same area as the general circulation path, when feasible, and shall extend to the high tide level. 99AG-16.4.1
 - Clear width preferred is 48”, 36” acceptable. 99AG-16.4.3
 - Openings in the route surface, such as on a boardwalk, ½” or less if perpendicular or diagonal, ¼” or less if parallel to the route 99AG-16.4.4
 - Slopes from 0% to 5% for any length, 5.1% to 8.33% for up to 50’, 8.34% to 10% for a maximum of 30’. 99AG-16.4.8.2.1-3
 - Resting spaces shall be 60” in length 99AG-16.4.8.2.2-3
 - The cross slope shall be 3% 99AG-16.4.8.1
 - If the route is less than 60” wide, passing spaces a minimum of 60” x 60” shall be provided at least every 200’. 99AG-16.4.6

Section 18: Exhibits

- Accessible exhibit design elements include font style and size, color contrast, tactile exhibits, interactive exhibits, controls, exhibit mounting heights and positioning of exhibits on path of travel.



Section 25: Parking

- Where parking is provided, appropriate accessible spaces shall be provided including proper number, van spaces, with appropriate signage and location.
 - located as near as possible to a primary entrance or on the shortest accessible route from parking to the facility, activity, etc. CBC-1129B.1
 - minimum of one in every 25 spaces should be accessible and one in every eight accessible spaces, but no less than one, should be served by a minimum 8' wide access aisle on the passenger side.
- If passenger drop-off and loading zones are provided, one zone shall have the following: CBC-1131B.2.1
 - accessible aisle 5' x 20' provided adjacent and parallel to the vehicle pull-up space
 - Walk surfaces crossing or joining the vehicular way not separated by curbs, railings or other elements shall be identified with continuous, detectable warnings.

Section 31: Ramps

- Whenever the slope on an Exterior Routes of Travel or Accessible Paths of Travel exceeds 5%, a ramp must be provided. ADAAG-4.8.1, CBC-1133B.5.1
 - ramps shall have a minimum width of 48"
 - maximum linear slope on the ramp shall not exceed 8.3%. ADAAG-4.8.2, CBC-1133B.5.3
 - maximum cross slope on the ramp shall not exceed 2%. ADAAG-4.8.6, CBC-1133B.5.3.1
 - Ramps shall have level landings at top, bottom and each change of direction. Intermediate landings shall be provided at intervals not exceeding 30" of vertical rise. ADAAG-4.8.4, CBC-1133B.5.4.1
 - Top landings minimum of 60"x60"
 - Intermediate landings at change of direction minimum 60"x72"
 - Bottom landings minimum ramp width x72"

Section 33: Routes of Travel

- The most usable route for people with mobility impairments is the Exterior Route of Travel (ERT) and should incorporate the guidelines of curb ramps, ramps, etc. when necessary. CBC-1127B.1
- Slope in the direction of travel shall be a maximum of 5%. Where conditions dictate a slope greater than 5%, a ramp shall be provided. ADAAG-4.3.7, CBC-1133B.7.3
 - If an accessible route is less than 60" wide, passing spaces at least 60" x 60" shall be located at maximum intervals of 200'. ADAAG-4.3-4, CBC-1133B.7.1
 - Grate openings shall have spaces no greater than 1/2" wide and may be elongated, provided that long direction runs perpendicular to the primary direction of travel. ADAAG-4.5.4, CBC-1124B.4
 - Where wheelchair traffic is expected to U-turn around an obstacle, the route width must be a minimum of 42" on the approach and 48" around the obstacle. ADAAG-4.3.3
 - Openings in the surface, such as on a boardwalk, cannot be greater than 1/2" wide. Elongated openings shall be placed so long dimension is perpendicular or diagonal to the direction of travel. Exception: openings are permitted to run parallel to the direction of travel if the opening is no wider than 1/4". 99AG-16.3.3

Section 38: Stairs

- Where stairs are provided, in addition to required elevators, lifts or ramps, they shall be on route of travel and meet the following guidelines:
 - heights and widths of the treads and risers shall be uniform, treads shall be no less than 11" from riser to riser CBC-1133B.4.5.3
 - Open risers are not allowed. CBC-1133B.4.5.3
 - When stairs occur outside a building, the upper approach and all treads shall be marked by a strip of clearly contrasting color at least 2" wide placed parallel to the nose of the step or landing. Interior stairs shall have contrasting color on the upper approach and the lower tread of each stair. CBC-1133B.4.4



- Handrails shall be provided on both sides of stairs and extend parallel to the floor 12” beyond the upper riser and 12”, plus one tread width, beyond the lower riser. ADAAG-4.9.4(2), CBC-1133B.4.2.2
 - Handrails shall be 34” to 38” above the nosing of the treads. CBC-1133B.4.2.1

Section 41: Trails

- Unlike Exterior Routes of Travel (ERT) and Outdoor Recreation Access Routes (ORAR), trails provide the means for the activity of hiking. Trails provide access to remote locations and unique park features. They offer visitors the opportunity to experience various park settings.
- Whenever hiking is considered one of the primary activities offered, or where there is a large concentration of trails, every effort should be made to install and maintain accessible trails.

Section 43: Vista Points and Overlooks

- Vista points, roadside pullouts and/or overlooks, their features, views and the experiences they provide, must be accessible. 99AG-16.10.1
 - Where multiple viewing areas are provided, a minimum of one viewing opportunity for each distinct point of interest shall be accessible. 99AG-16.10.1
 - Vista points and overlooks shall be located on an accessible route of travel, including an outdoor recreation access route (ORAR) or accessible trail. 99AG-16.10.1
- The viewing area shall have at least one maneuvering space of 60” x 60” or a T-shaped space at least 36” wide and 60” long on each leg (Figures 43-1 & 43-2). 99AG-16.10.2, ADAAG-4.2.3
 - Each distinct viewing opportunity shall allow unrestricted viewing to accommodate eye levels between 32” and 51”. 99AG-16.10.3
 - Where telescopes or periscopes are provided in an area, at least 20%, but never less than one, shall be accessible. 99AG-16.11.1



| Appendix D | Additional Resources

CA State Parks: Access for Visitors with Disabilities

http://www.parks.ca.gov/?page_id=21944

CA State Parks: Interpretive Services Division

http://www.parks.ca.gov/?page_id=25531

San Mateo Creek Conservancy

<http://trestleswetlands.org/>

California State University, Monterey Bay

<http://scienceillustration.org/index.htm>