



ENGINEERS WITHOUT BORDERS USA

University of Nebraska Chapter

Who are we?

EWB is an international service organization that works to build a better world through engineering projects and empowering communities. UNL and UNO are host to a student chapter.



ENGINEERS WITHOUT BORDERS USA
University of Nebraska Chapter



Where are our projects?

- Zambia
- Madagascar

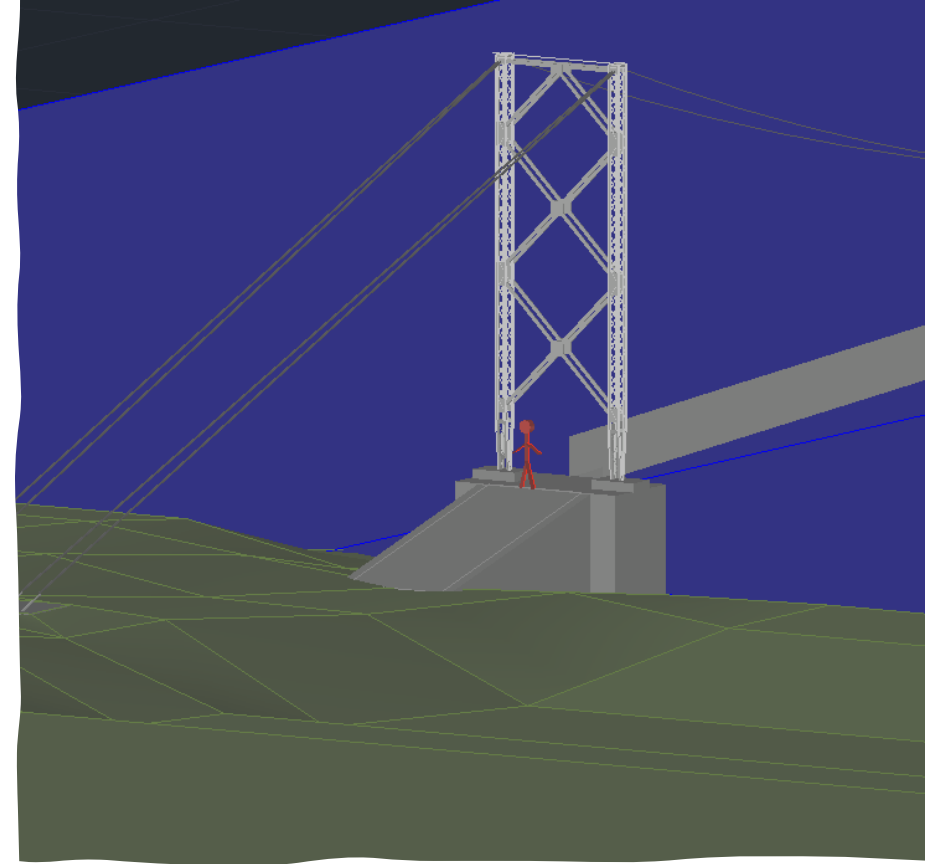




Madagascar Team

Madagascar Team is working on a solar panel project to bring lighting to five schools in our partner city Kianjavato

Zambia Team



Zambia Team is building a bridge over a dangerous river to connect a community to a hospital and more



Nebraska Team

Nebraska Team focuses on local volunteering and fundraising for our projects



FREE PIZZA THURSDAY **MMM DD 2024**
11:00 AM - 2:00 PM

UNL STUDENTS, PICK UP YOUR SLICE AND NETWORK WITH COMPANY NAME!

2ND FLOOR KIEWIT HALL
Bridge between Kiewit and Othmer

ONE FREE SLICE: JUST SHOW UP
TWO FREE SLICES: BRING YOUR RESUME

Company Logo





Travel


Both project teams
are traveling
Summer 2025!

Madagascar Team
will be monitoring existing
solar installations, and
adding more

Zambia Team will be
getting final design
approval, and preparing
for construction



KALOMO RIVER PEDESTRIAN BRIDGE ZAMBIA



COUNTRY MAP

General Design Notes
Dimensions are in centimeters (cm) unless noted otherwise.

Steel Wire Rope:
7x7 (6/1) for 13mm Diameter
7x19 (12/6/1) for 32mm Diameter
With a Tensile Strength of 160 kg/mm²

Structural Steel:
Steel Grade - Fe 410
Tensile Strength: $f_t \geq 410 \text{ N/mm}^2$
Yield Stress: $f_y \geq 250 \text{ N/mm}^2$
Permissible Tensile Stress: $\sigma_{st} = 150 \text{ N/mm}^2$

Reinforcement Steel:
Steel Grade - Fe 415

Yield Stress: $f_y \geq 415 \text{ N/mm}^2$
Permissible Tensile Stress: $\sigma_{st} = 230 \text{ N/mm}^2$

Concrete:
For Structures - 1:2:4 (M15)
For Miscellaneous - 1:3:6 (M10)



Unit Weights (kg/m³):
Concrete - 2200
Stone Masonry - 2100
Steel - 7850
Water - 1000

Design Loads (N/m):
Live: 3455
Dead: 884.95

Minimum Freeboard: 2.68m

Index

1 - Title Sheet	11 - Suspenders
2 - General Arrangements	13 - Walkway & Tower Foundation
3 - Main Cable Anchorage	18 - Tower: Assembly & Layout
5 - Main Cable Deadman Anchor	19 - Tower: Base Element
7 - Walkway Fitting	21 - Tower: Intermediate Element
8 - Crossbeam	23 - Tower: Top Element
9 - Steel Deck Standard Panel	26 - Tower: Saddle
10 - Steel Deck Special Panel	28 - Approach Ramp

		CHAPTER NAME: UNIVERSITY OF NEBRASKA LOCATION: LINCOLN, NE, USA CONTACT: web@unl.edu	REC: PROJECT LEAD: GONNOR NEVILLE PROJECT LEAD: KATHEN CUDLY
04/20/2024 ISSUED FOR REC REVIEW		ENGINEER WITHOUT BORDERS HAIKUN WANG TITLE SHEET	1



Experience real world engineering



Work with career engineers



Work with other engineering students



Gain volunteer experience

General Meetings: Thursdays at 7:00 pm!

Omaha: PKI 207

Lincoln: Kiewit Hall A445

Team Work Meetings:

PKI 108/KH A445

Madagascar: Sundays, 3-5 pm

Zambia: Sundays, 5-7 pm

Nebraska: Mondays, 5-6 pm



ENGINEERS WITHOUT BORDERS USA

University of Nebraska Chapter

Want more info about Engineers Without Borders? ewb.unl.edu

Get emails about
our next meetings



EWB-NU Official E-Mail List Form

Get involved &
More information

