



Engineering And Robotics Learned Young

◆ EARLY ◆

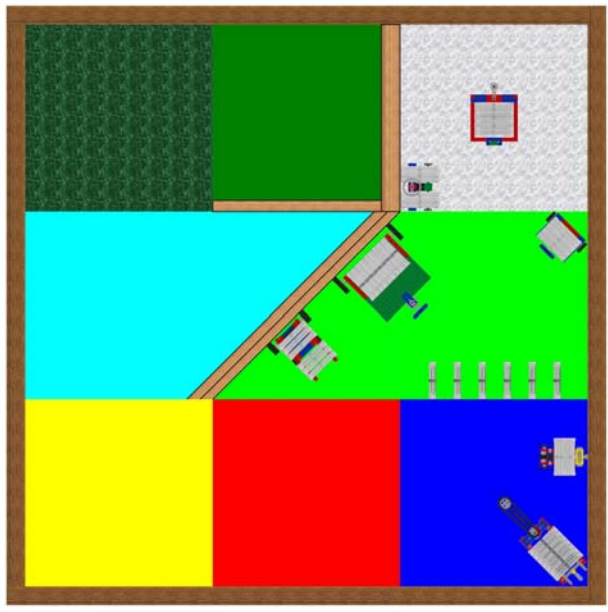
Spring 2007 Robotics Competition Mission Field Details

The 2006-2007 EARLY Robotics Competition mission field, Jack County, is a 4' x 4' field with a 2" x 4" border with various terrain features. The following information is provided for constructing the mission field.

Jack County



2006-2007 EARLY Mission Field



Spring 2007 Model Positions



Spring 2007 Mission Field

Field
48" x 48" x 3/8"
plywood

Field Perimeter
2" x 4" boards

Highlands - West
15" x 15"
3/4" plywood

Highlands - East
13 1/2" x 14"

Hills
13 1/2" strip of
3/4" corner molding
creating 5/8" peak

River Valley
28" top / 13" bottom
x 15"

Levees
2 strips of
3/4" x 1/4" molding

Delta
15" x 15"



Ethanol Processing Facility
15" x 15"
3/4" plywood

Bluffs
1 1/2" x 15" x 3 1/2" tall
(standard 2" x 4")

Green Products Processing Facility
15" top / 30" bottom
x 15"

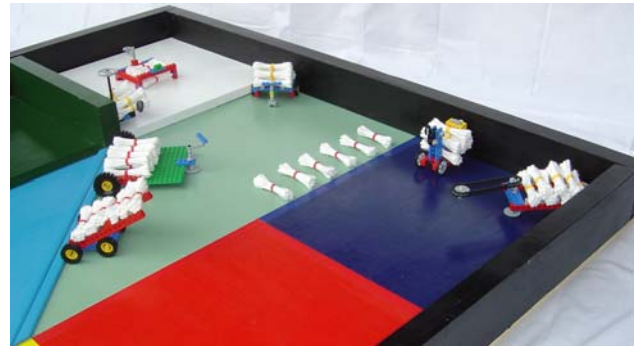
Market
15" x 15"

Home
15" x 15"

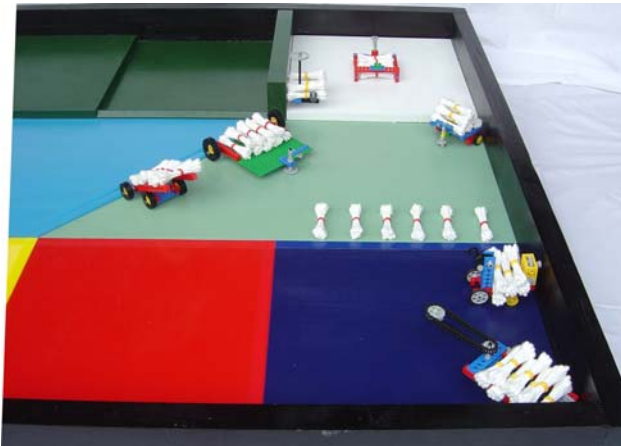
Mission Field Dimensions



View from Home



View from Home of
the Ethanol Processing Facility,
Green Products Processing Facility, and Market



View from the Market of
the Ethanol Processing Facility
and Green Products Processing Facility



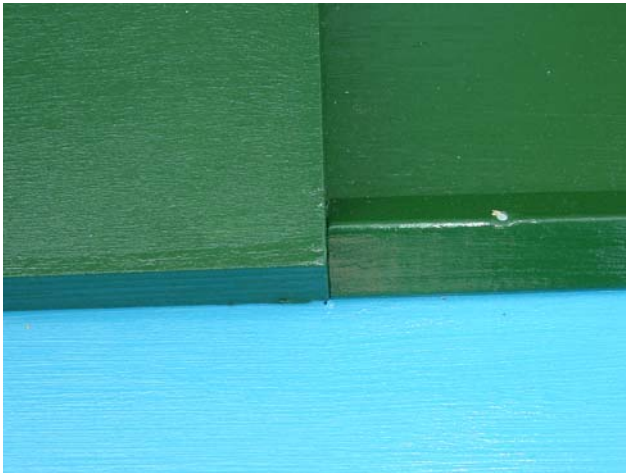
View from the Ethanol Processing Facility of
the Market and Green Products Processing Facility



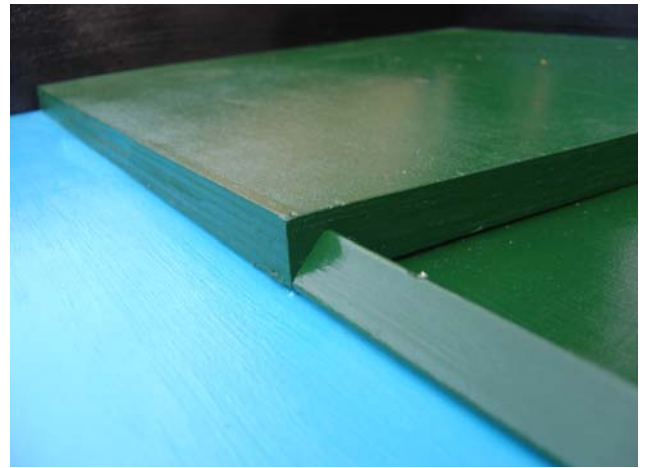
View from Home of the Market



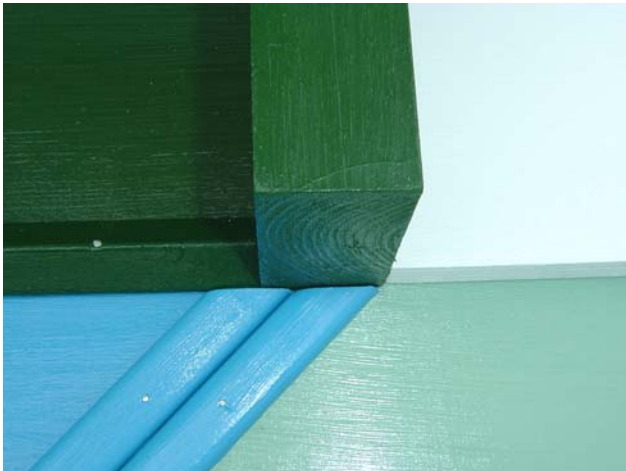
View from Home of
the Ethanol Processing Facility and
Green Products Processing Facility



West Highlands, East Highlands,
River Valley and Hills intersection



West Highlands, East Highlands,
River Valley and Hills intersection



East Highlands, Ethanol Processing Facility,
River Valley, Green Products Processing Facility,
Hills, Bluffs, and Levees intersection



East Highlands, Ethanol Processing Facility,
River Valley, Green Products Processing Facility,
Hills, Bluffs, and Levees intersection



River Valley, Green Products Processing Facility,
Delta, Home, and Levees intersection



Bluffs and Hills intersection



$\frac{3}{4}$ " \times $\frac{1}{4}$ " Moulding



$\frac{3}{4}$ " \times $\frac{3}{4}$ " Corner Moulding

- The bottom of the mission field is a 4' x 4' sheet of $\frac{1}{2}$ " plywood.
- The outer boundary of the mission field is made of 2x4 boards (actual dimension of $1\frac{1}{2}$ " \times $3\frac{1}{2}$ ") and is *black*. The side of the 2x4 board that is $1\frac{1}{2}$ " is attached to the plywood with glue, nails, or screws.
- **HOME** is a 15" by 15" flat area and is *red*.
- The **WEST HIGHLANDS** is a 15" by 15" piece of $\frac{3}{4}$ " plywood and is *green*. It is positioned against the mission field boundary corner with the exposed edges adjacent to the **EAST HIGHLANDS** and the **RIVER VALLEY**. The plywood is fastened to the bottom of the mission field with glue, nails, or screws.
- The **EAST HIGHLANDS** is a $13\frac{1}{2}$ " by 14" flat area and is *green*.
- The **RIVER VALLEY** is a flat trapezoidal area and is *light blue*. The side of the trapezoid adjacent to the **DELTA** is 13", the side adjacent to the **HIGHLANDS** is 28", the side adjacent to the border is 15", and the side adjacent to the **GREEN PRODUCTS PROCESSING FACILITY** is defined by the **LEVEES**.
- The **DELTA** is a 15" by 15" flat area and is *yellow*.
- The **ETHANOL PROCESSING FACILITY** is a 15" by 15" piece of $\frac{3}{4}$ " plywood and is *white*. It is positioned against the mission field boundary corner with the exposed edges adjacent to the **EAST HIGHLANDS** and the **GREEN PRODUCTS PROCESSING FACILITY**. The plywood is fastened to the bottom of the mission field with glue, nails, or screws.
- The **GREEN PRODUCTS PROCESSING FACILITY** is a flat trapezoidal area and is *light green*. The side of the trapezoid adjacent to **HOME** and the **MARKET** is 30", the side adjacent to the **ETHANOL PROCESSING FACILITY** is 15", the side adjacent to the border is 15", and the side adjacent to the **RIVER VALLEY** is defined by the **LEVEES**.
- The **MARKET** is a 15" by 15" flat area and is *blue*.

- The **BLUFFS** feature is a 15" long 2x4 board (actual dimension of $1\frac{1}{2}$ " x $3\frac{1}{2}$ ") and is *green*. It is positioned between the **EAST HIGHLANDS** and the **ETHANOL PROCESSING FACILITY**. The 2x4 board is fastened to the field with glue, nails, or screws.
- The **HILLS** feature is a $13\frac{1}{2}$ " long $\frac{3}{4}$ " x $\frac{3}{4}$ " corner molding and is *green*. It is positioned between the **EAST HIGHLANDS** and the **RIVER VALLEY** such that it makes a peak. The molding can be purchased at Home Depot (part # 927-252). The molding is fastened to the mission field with glue, nails, or screws.
- The **LEVEES** feature is two strips of $\frac{3}{4}$ " x $\frac{1}{4}$ " screen molding and is *light blue*. It is positioned from the intersection of the **EAST HIGHLANDS** and the **ETHANOL PROCESSING FACILITY** to the intersection of the **DELTA** and **HOME**. The molding can be purchased at Home Depot (part # 927-139). The molding is fastened to the mission field with glue, nails, or screws.
- The *light blue* color can be made by mixing 1 part blue paint with 1 part white paint.
- The *light green* color can be made by mixing 1 part green paint with 1 part white paint.

Please visit the EARLY Neighborhood Forums at www.EARLYrobotics.org or contact Mission.Control@EARLYrobotics.org with any questions or comments.

Thank you for maintaining the spirit of the game!