# Seeding Strategy for *icreate* robot
## Game Board

1. Picks up the closest cup containing fossil fuel and puts the cup in the cup area in the back of robot. It also puts fuels in fuel area in back of robot

2. Moves over to green fuel cup and repeats the process as 1

3. Move to last fossil fuel cup & repeats process

4. Moves over to last green fuel cup and repeats the process

5. Collects green fuel that is sitting in the highest part of the valley (same design as 1)
   Uses camera or light sensor to determine which side of the field the green fuel is

6. Moves over the collect the fossil fuel on the slope (same design as 1)
   Depending on which side, the robot will take a different path

7. Robot goes down to the center valley of the valley

8. Robot uses the camera to find the water balls by spinning around looking for blue "blobs" Once found, the robot comes up to the ball and tosses them into back of the robot (basket)

9. Moves over to our starting box and drops off all the cups
   Depending on which side, the robot will take a different path

10. Robot moves to Botguy, picks him up & picks up tubes

11. Robot travels over our peak and drops off all fuel and Botguy

Peak B

Slope B

Side B

Starting Box B

Starting Box A

Side A

Slope A

Peak A

Botball
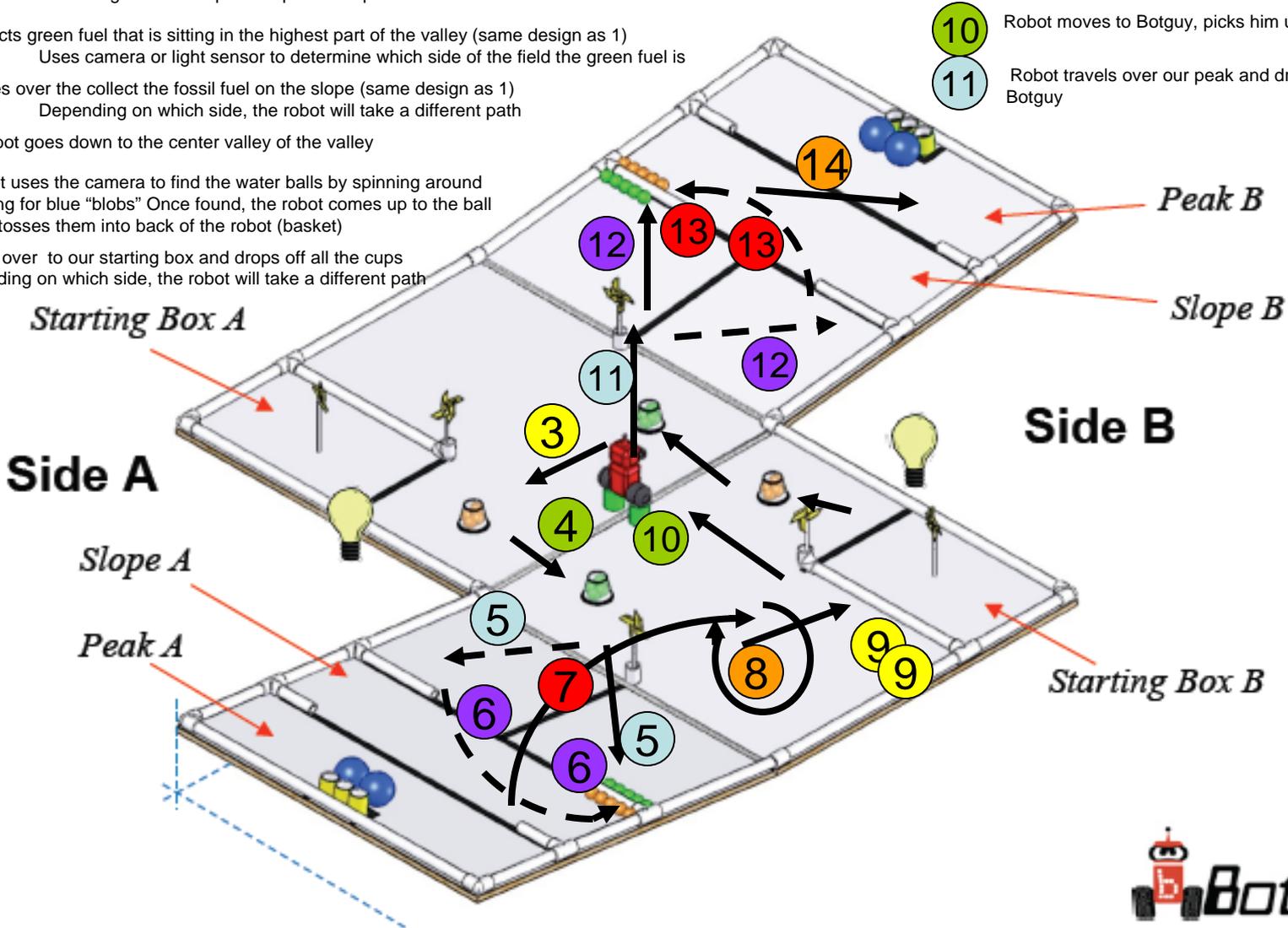
# Notes

1.   Picks up the closest cup containing fossil fuel and puts the cup in the cup area in the back of robot. It also puts fuels in fuel area in back of robot

2.   Moves over to green fuel cup and repeats the process as 1

3.   Moves over to last fossil fuel cup and repeats process

4.   Moves over to last green fuel cup and repeats the process

# Notes

5. Collects green fuel that is sitting in the highest part of the valley (same design as 1)

    Uses camera or light sensor to determine which side of the field the green fuel is

6. Moves over the collect the fossil fuel on the slope (same design as 1)

    Depending on which side, the robot will take a different path
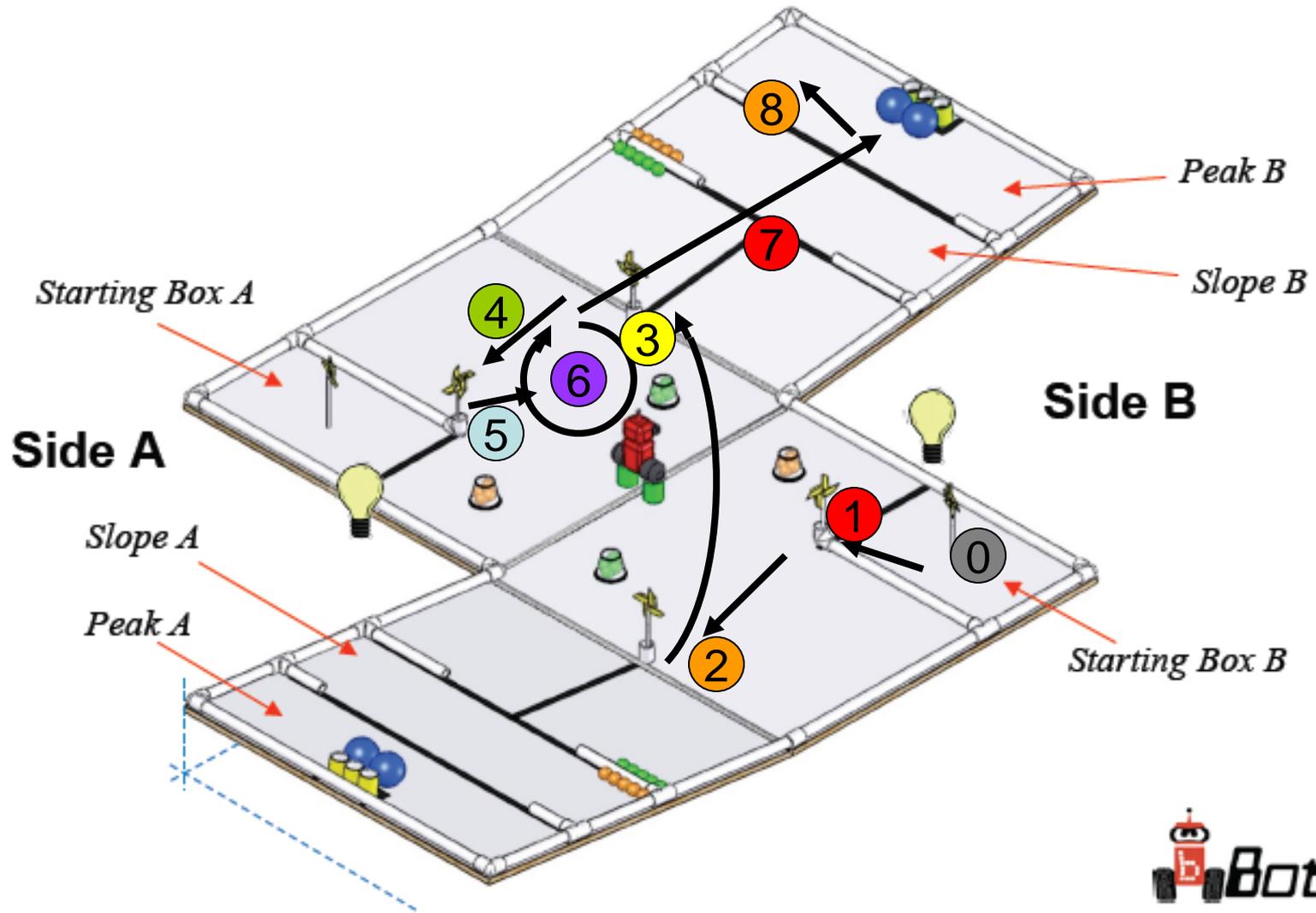
7. Robot goes down to the center valley of the valley

# Notes

8. Robot uses the camera to find the water balls by spinning around looking for blue "blobs"

    Once found, the robot comes up to the ball and tosses them into back of the robot (basket)

9. Moves over to our starting box and drops off all the cups

    Depending on which side, the robot will take a different path

10. Robot moves over to Botguy and picks him up & picks up tubes

11. Robot moves foreword with Botguy

# Notes

12. Moves over the collect the fossil fuel on the slope (same design as 1)

    Depending on which side, the robot will take a different path

13. Moves over to our starting box and drops off all the cups

    Depending on which side, the robot will take a different path

14. Robot travels over to our peak and drops off all fuel and Botguy

# Seeding Strategy for *CBC based* robot

## The Game Board

# Notes

0.   *note: put starting turbine in turbine rack by hand*

1.  Move to closest wind turbine, picks it up, and places it into the wind turbine rack

2.  Move to 2$^{nd}$ turbine and collect with same method

3.  Move to 3$^{rd}$ turbine and collect with same method

4.  Move to 4$^{th}$ turbine and collect with same method

# Notes

5. Robot moves over to middle of board in a position near where the water balls will roll

6. Robot uses the camera to find the water balls by spinning around looking for blue "blobs"

   Once found, the robot comes up to the ball and tosses them into back of the robot (basket)

7. Robot goes to the peak, takes the stored wind turbines, and puts them in the proper spot

8. Robot drives to the side and turns off motors

# Point Total in Seeding- 1188

| | Your Starting Box | Your Slope | Your Peak | | |
|---|---|---|---|---|---|
| Fossil fuel (orange pom) paired with a green object (pom or foundation) | 1 | 2 | 3 X20 | 60 |
| Green object (pom or foundation) | 1 | 2 | 3 X22 | 66 |
| Water resource (blue ball) | 10 | 20 | 30 X4 | 120 |
| Wind turbine correctly installed in a foundation | 0 | 20 | 30 X4 | 120 |
| Wind turbine not correctly installed in a foundation | 0 | 5 | 10 X0 | 0 |
| Mobile holder (plain white PVC connector) | 5 | 0 | 0 X2 | 10 |
| Fuel container (clear cup) | 5 | 0 | 0 X4 | 20 |
| Botguy | | X 2 | X 3 | **X3** |

**TOTAL POINTS**
**1188**

# *Icreate* strategy for Double Elimination A.



The Game Board
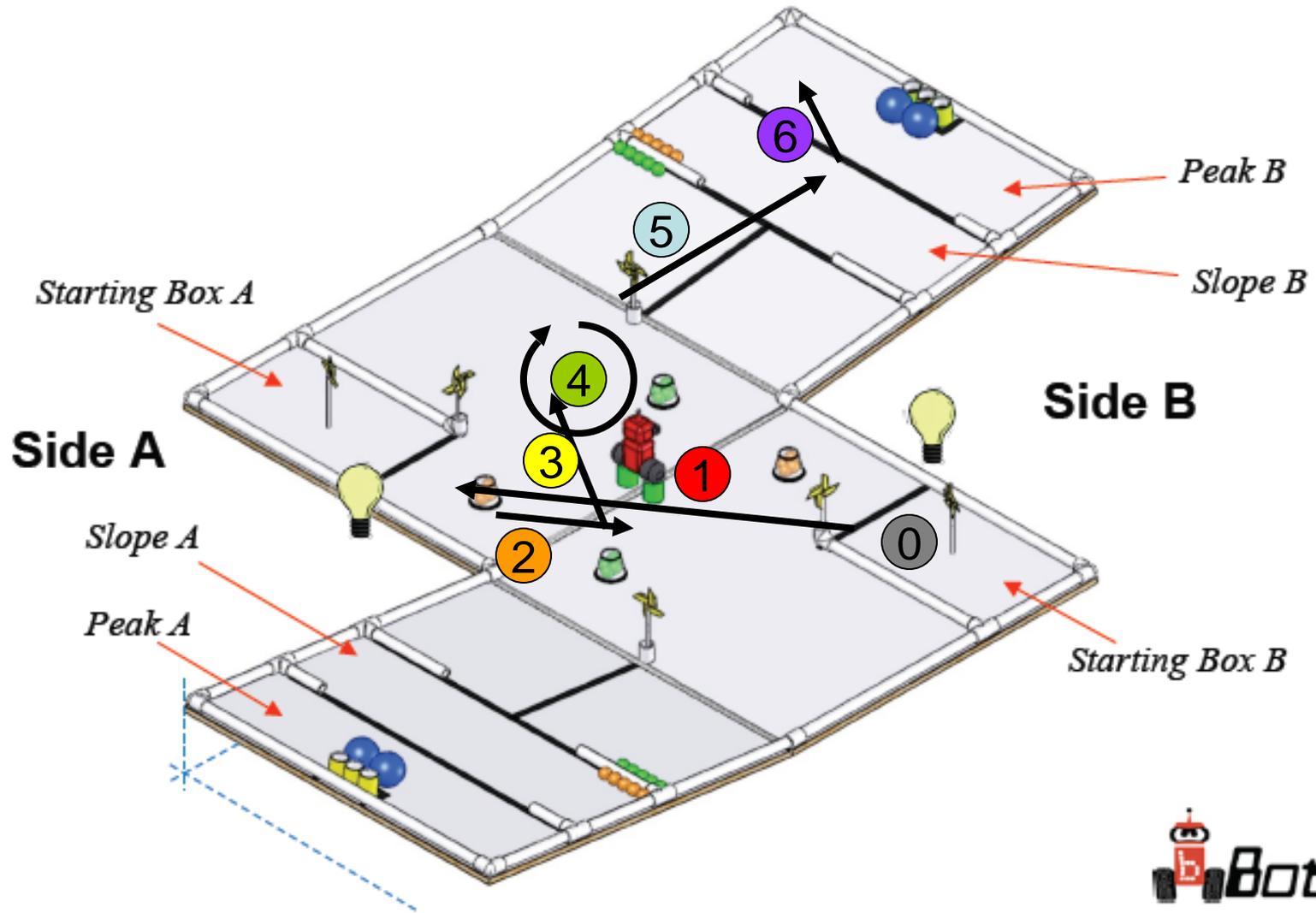
# Notes

0. Robot within the first seconds triggers Leapfrog grabbing Botguy

1. Moves full speed towards center of field with Botguy trailing behind by thread while messing up the center of the field

2. Messes up field (green fuel cup) area

3. Robot travels to likely position of our water balls

# Notes

4.  Robot uses the camera to find the water balls by spinning around looking for blue "blobs"

    Once found, the robot comes up to the ball and tosses them into back of the robot (basket)

5.  Goes up hill while messing up more field

6.  Goes and dumps everything off and turns off motors

# *CBC based* strategy for Double Elimination A.



The Game Board

Peak B

Slope B

Side B

Starting Box A

Side A

Slope A

Peak A

Starting Box B

Botball
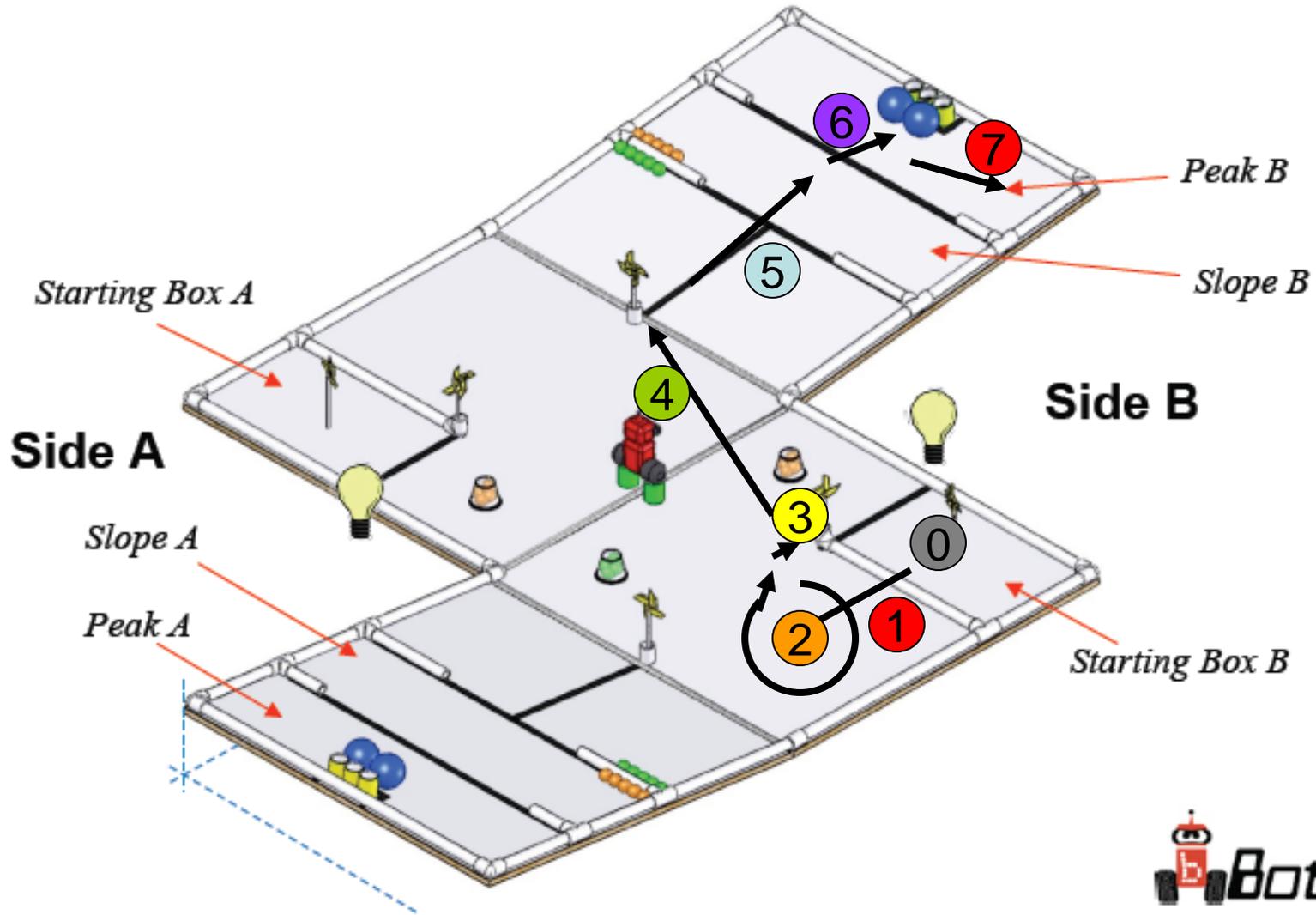
# Notes

0. *note: put starting turbine in turbine rack by hand*

1. Moves towards likely position of balls

2. Robot uses the camera to find the water balls by spinning around looking for blue "blobs"

    Once found, the robot comes up to the ball and tosses them into back of the robot (basket)

3. Goes over and gets closest turbine to starting base

# Notes

4. Moves over and gets turbine on side B

5. Goes over to top of our hill and deploys wind turbines into each individual holder

6. Drops off both water balls and turns off the motors