# DIMENTION • **Game Treatment**

### Gameplay Background Story

One day, a painting covered with a curtain suddenly shook in a museum. Then, a limb composed of many lines started to extend from the screen. The surrounding environment changed as the biological limb touched the surrounding objects. The object's shape began to distort and deform until it spread to the entire room, and the scope of influence continued to expand.

Then, various two-dimensional monsters ran out of the building. The police and the army tried to attack these creatures with firearms and ammunition, but the bullets did not affect them, and those they attacked would be two-dimensionalized. After that, the government began to try to find ways to deconstruct the damage to these two-dimensional creatures. After paying a terrible price, the government successfully developed a weapon to deal with these monsters; "Chalk." "Chalk." looks like an ordinary piece of chalk, but the weapons drawn by it can effectively kill two-dimensional creatures. Due to the limited supply of "chalk," only a minimal number of elites can be equipped with this weapon, and these elites are called "two-dimensional killers." The player plays a "two-dimensional killer" who performs a special mission. Afterward, the protagonist followed the elite team to the periphery of the contaminated area and began to carry out the mission. The team's goal is to find the source of the 2D creatures and find a solution.

In the mission, the protagonist and the members of the team will act separately on different routes, and the player's role will face the difficulties and dangers that may be faced alone.



### **Pillars**

#### Drawing System: (bluerptints)

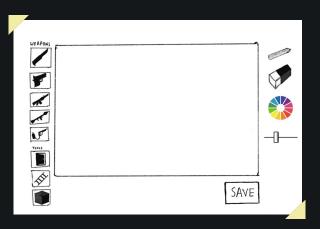
The core gameplay revolves around a drawing system where players use a painting panel to create custom weapons by sketching them based on blueprints. Players must utilize creativity and strategy, using limited resources to draw functional weapons that are crucial for combat. This innovative mechanic adds a unique layer to gameplay, allowing players to personalize their approach to each enemy encounter and challenge.

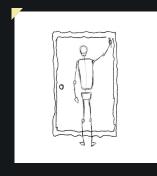
#### Puzzles: (Tools blueprint)

Another core element of the game is puzzle-solving. Throughout the game, players will encounter various challenges and obstacles. To overcome these, they will rely on the tool system to draw solutions using the painting mechanic, such as doors, ladders, or boxes. This encourages creative problem-solving and integrates seamlessly with the game's core drawing system.

#### Boss Fight

The final core element is the boss battles. Bosses in the game are uniquely challenging, requiring players to use both the drawing system and their puzzle-solving skills to defeat them. Each boss stage has its own set of mechanics, forcing players to adapt their strategy and creatively use the environment and their drawn tools to succeed.

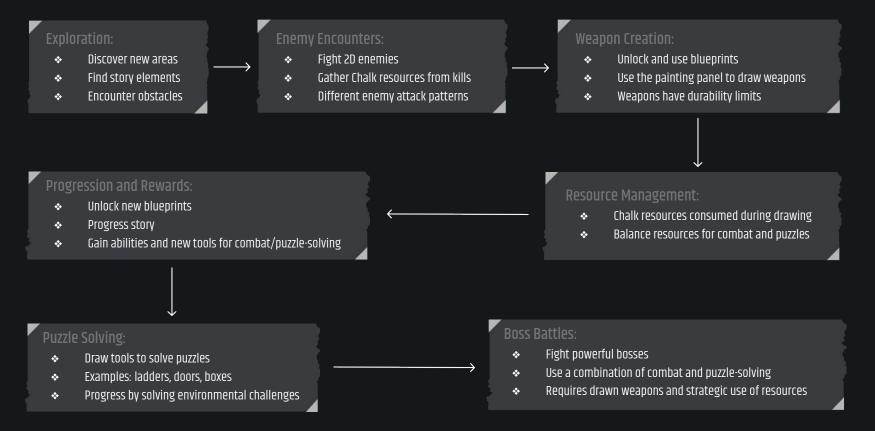






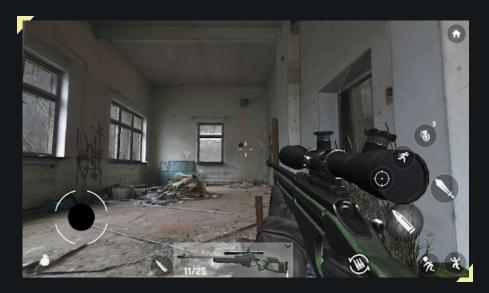


### **Core loop**





### 3C: Camera



First Person Shooter

First-Person: The camera is positioned at the player's eye level, allowing for an immersive experience where players see the world through their character's eyes.

Field of View (FOV): FOV value of 90°. Large enough for player to have a wider view of the environment, which can help in spotting enemies and navigating through the game world.

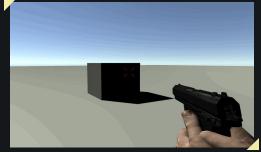


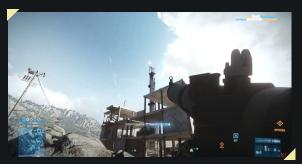
### 3C: Camera

- In the first-person view, it is essential to provide clear and effective feedback to the player, particularly regarding weapon handling and readiness. Each weapon will be positioned slightly to the right of the screen, with the aim directed at the center. This ensures the player has an unobstructed view of the game world while still being aware of their weapon and actions.
- FOV FOV value of 90°. Large enough for player to have a wider view of the environment, which can help in spotting enemies and navigating through the game world...
- Camera 35mm tends to feel more "zoomed out" with a slightly wider FOV, which can help the player see more of the environment.









Player View Holding Sword Player Holding Pistol/Rifle Player Holding Rocket Launcher



### 3C: Character



The protagonist is a young woman with remarkable artistic talent and advanced combat skills. Hired by the government, she enters a city overrun by 2D creatures that have escaped from paintings. Equipped with "Chalk," a tool that brings her drawings to life as weapons, she must explore the city, solve puzzles, and manage limited resources to close the portal in the museum and save the city.

Since the game is in first-person perspective, the character's full appearance won't be visible, only a simplified version will appear in the UI and UX.





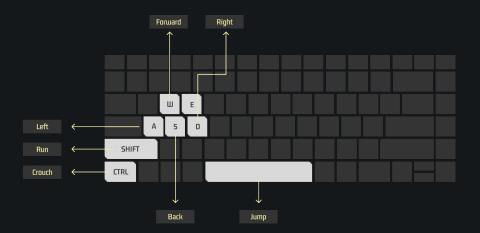
### Character Background Story

- K has shown great artistic talent since childhood and excellent physical fitness and adaptability in military school. Because of her talent, K was recruited as an agent to fight against the 2D creatures invading the city, causing panic and chaos.
- When the government discovered that these creatures came from the museum, they sent a team to solve the problem. As a member of the team, K not only needs to use her artistic talent but also advanced combat skills to fight these creatures. K's weapon is a special tool called "Chalk," which can be used to draw weapons and function according to the blueprint, helping her gain an advantage in battle.
- After entering the city occupied by 2D creatures, Members of the government team began to act separately. The town's streets are filled with a terrifying atmosphere, and strange creatures roam around her. She must explore the city, solve various complex puzzles, and collect resources to survive the battle with these creatures. Her mission is not only to destroy these creatures but also to find a way to close the portal to stop the spread of 2D creatures and restore peace to the city. As K goes deeper into the city, she gradually uncovers the secret of the origin of the 2D creatures. Those 2D creatures come from the same source: a powerful creature composed of lines. And K needs to fight that powerful creature alone.



### 3C: Control System

#### Keyboard Layout



#### Control System

▶ Walk

Use the W, A, S, and D keys on the keyboard for forward, backward, left, and right movements.

→ Movement Speed:

Medium speed, suitable for exploration and precise control.

**▶** Run

Hold the Shift key while using the W key to move forward faster.

- ▶ Movement Speed: High speed, suitable for quickly traversing large areas or avoiding enemy attacks.
- **→** Jump

Press the Space key.

**▶** Jump Height

Medium height, capable of overcoming low obstacles

▶ Crouch/sneak

Press the Ctrl key to enter a crouching position

▶ Movement Speed

Low speed, suitable for situations requiring stealth.



### Player journey

### LEVEL 1

#### **Exploration**:

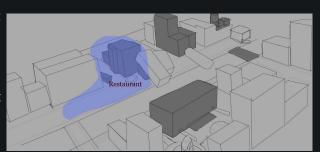
They enter a nearby restaurant to explore, learning the basics of movement and interaction.

#### Start:

The player begins beside an armored vehicle, receiving their mission briefing.

#### **Blueprint Collection:**

In the kitchen, they discover the Knife Blueprint and are introduced to the Drawing Panel mechanic to create their first weapon.



#### Combat:

The player steps outside and encounters three enemies. They use the knife to defeat them.

#### Reward:

Upon defeating the enemies, the player collects the Pistol Blueprint for future use.

#### **LEVEL 2**

#### **Blueprint Collection:**

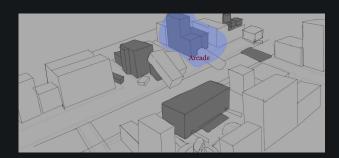
The player finds the Rifle Blueprint near the arcade.

#### Combat:

They use the new rifle to eliminate the enemies and advance to the next level.

#### **Exploration:**

Reaches the arcade, where multiple Pixel Style enemies are gathered.



#### Obstacle:

The player encounters a barrier and uses the Tools Blueprint to overcome it.



### Player journey

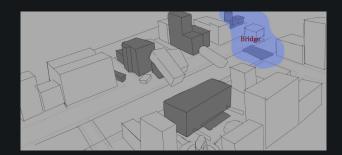
### **LEVEL 3**

#### **Exploration:**

The player discovers a broken bridge obstructing the path.

#### **Puzzles:**

Utilizes the Tools Blueprint to climb the water tower and gain a strategic high vantage point.



#### Combat:

Engages in combat, defeating enemies stationed on the building's roof.

#### **Puzzles:**

Uses the Tools Blueprint to paint the missing parts of the bridge, solving the puzzle to progress.

### **Boss Fight**

#### **Puzzles:**

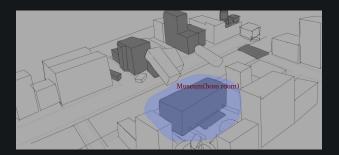
Solve a puzzle to unlock a secret room containing the special weapon blueprint.

#### Reward:

Successfully gaining access to the boss room prepares the player for the final showdown.

#### **Exploration**:

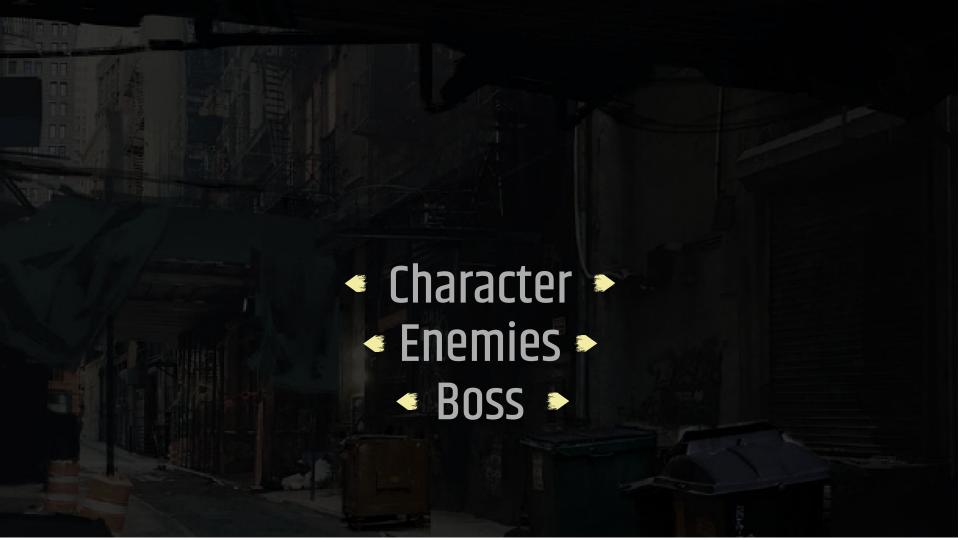
Navigate the environment to find the entrance to the boss room.



#### Combat:

Face increasingly powerful enemies as the player progresses.





### **Character Design**

Character setting:

Name: K Age: 26

Gender: Female Occupation: Agent

Appearance description: A capable woman with short brown hair

#### System:

- Interaction system: K can solve puzzles by interacting with the environment, such as drawing patterns on the wall with "Chalk" to open hidden passages or remove obstacles.
- Growth system: K can unlock the ability to draw different weapons by obtaining weapon blueprints and enhance the ability to use "Chalk" in various environments.



#### Skills:

- Outstanding artistic creation ability can quickly transform concepts into visual images
- Advanced combat skills, good at close combat and flexible tactics
- Proficient in using the "Chalk" tool and able to give functions to paintings



### **Enemy 1 - Pixel Enemy**

**Description:** The first enemies players face are 2D, pixelated creatures with simple yet dynamic movements, evoking classic video games. Their low-res design contrasts with the detailed environments, highlighting the warped reality, while players use "Chalk" to defeat them.

#### Where we can expect/Find



First Appear Beside the Arcade.



#### Fast Type

- <sup>'</sup> Speed: Fast
- Health: Low
- Combat Style: Bites with teeth
- Power Level: Low damage, High attack speed



#### Normal Type

- → Speed: Regular
- <sup>1</sup> Health: Regular
- Combat Style: Attacks with fists
- Power Level: Normal damage, Normal attack speed



#### Giant Type

- Speed: Slow
- → Health: High
- Combat Style: Hand slapping
- Power Level: Super high damage, Low attack speed

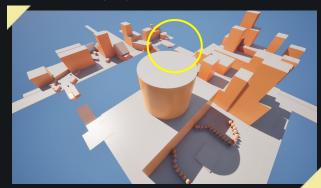


### Enemy 2 - Graffitti Enemy

#### Enemy 2, Graffiti Enemy

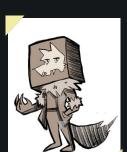
Description: Graffiti Style Enemies mimic earthly animals but fail comically, making them easy to spot as threats. These creatures swarm in groups, creating chaotic encounters with their unique attacks and evasions. Scattered across the map, they ensure players are always near a challenge.

#### Where we can expect/Find



Imposter wolf appears everywhere in the map. Others Appears after Level 3.







#### Imposter Mice (or any tiny creature)

- → Speed: High
- → Health: Low
- → Combat Style: Super high damage; Single attack
- Power Level: Self-destructs when approaching players, releasing chalk powder that delivers strong instant damage
- Imposter Wolf (or any aggressive creature)
- Speed: Regular (faster than the bird)
- Health: Regular (higher than the bird)
- Combat Style: Regular damage/Regular attack speed
- Power Level: Attacks with claws
- Imposter Mice (or any tiny creature)
- →Speed: High
- → Health: Low
- Combat Style: Super high damage; Single attack
- Power Level: Self-destructs when approaching players, releasing chalk powder that delivers strong instant damage



### **Boss-01**

#### Stage 1



#### Description:

An unknown creature, born for unknown reasons, is codenamed "Line." It has thick arms and limbs and is composed of many lines. There is a massive hole in the center of its body, and the two-dimensional creatures come from that hole.

#### Skills:

#### Normal attack



Boss perform a pre-action swing, swinging the arm to sweep forward. The boss's both arms can complete the action.

#### Ground Smash



The Boss will raise both hands in the air and then smash them violently to the ground. When both hands smash to the ground, a circular ground spike will be generated, causing knockback and damage to the player.

#### ▶ Roar



The boss will perform a preparatory action, roar for 3 seconds, and knock down the character's weapon during the 10-meter round.

#### ▶ Fly Down



The Boss will perform a preparatory action, then jump forward a certain distance, smash his massive body to the ground, and generate three ground spikes spreading outwards. When the outer spikes are generated, the inner spikes will disappear.



### Boss-02

#### Stage 2



#### Description:

"Line" does not have the habit of wandering around; it will only stay within a fixed range as if guarding something. When "Line" enters a violent state, the lines on its body become tighter, and the eyes floating in the gaps between the lines and the black hole in the center of the body disappear, as if all the power has been compressed. If the second form of "Line" is allowed to leave its territory, the consequences it can cause will be catastrophic.

#### Skills:

▶ Floating Movement



Boss can float to player.

▶ Energy Slash



Each attack of the Boss will be accompanied by a flying blade composed of chaotic lines, and the attack actions are divided into left-hand attack, right-hand attack, and two-hand cross-attack.

▶ Energy Ball



The boss raises his right hand, energy begins to gather in his right hand, and then it launches an energy ball, which moves slowly and gradually grows and dissipates after reaching its maximum volume.

▶ Energy Bombing



The boss begins to gather energy for a period, then generates several energy balls around the body and spreads around the body.

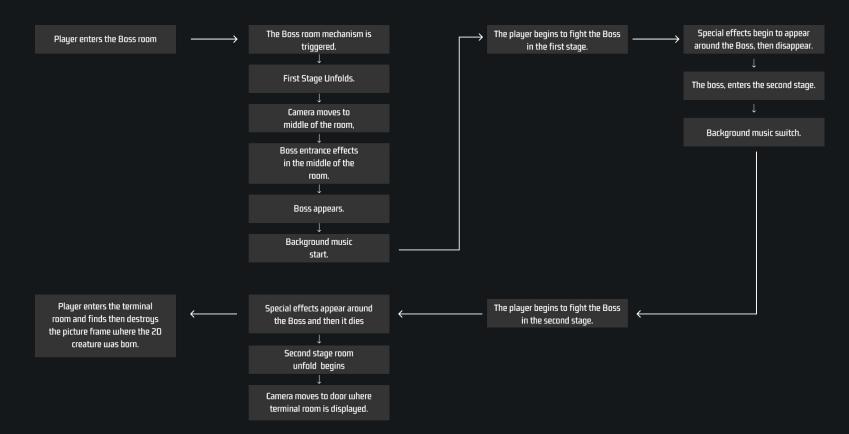
Energy Spray



The boss flies into the air and begins to gather energy for a while, then emits a powerful energy beam.



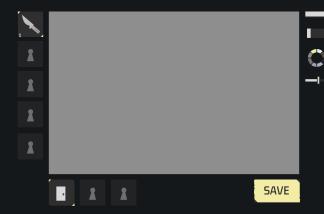
### Boss Fight - Flow





### Drawing System

#### Drawing Panel



▶ Type: Core Game Mechanic

Players use chalk to draw blueprints to create items. Chalk is consumed.

#### 1. Entering drawing mode:

Trigge

Player presses the designated key (e.g., "Tab" key).

Artini

Game enters drawing mode.

Drawing interface appears at the center of the screen.

Feedback:

HUD switches to the drawing interface.

Displays the drawing canvas and blueprint menu.

#### 3. Drawing the Pattern:

rigger:

Player starts drawing on the canvas using the mouse.

Action

Player draws the desired pattern or shape.

**Optional** 

Player can change line thickness or line color.

Feedback

Real-time drawing appears on the canvas.

#### **5.** Generating the Item:

Trigger:

Player exits drawing mode and starts item generation.

Game generates the item based on the Blueprints.

The item is created with the player's drawn appearance.

Feedback:

Item appears in the player's hand or at specified location. Visual and audio cues while successful item generation.

#### **2.** Selecting a Blueprint:

Trigger

Player browses the blueprint menu on the left.

Action

Player selects the desired blueprint (e.g., weapon, tool).

Feedback

Selected blueprint is highlighted.

Blueprint hint appears on the drawing canvas.

#### 4. Saving the Drawing:

Trigger

Player finishes drawing and clicks the "Save" button.

Action

System checks if the drawing is empty.

If not empty, saves the drawing for item generation.

Feedback

Success: Success sound plays.

Failure: Failure sound plays.

#### **6.** Using the Generated Item:

Trigger

Player equips or uses the generated item.

ction:

Item functions as per the blueprint (e.g., weapon attack, tool interaction).

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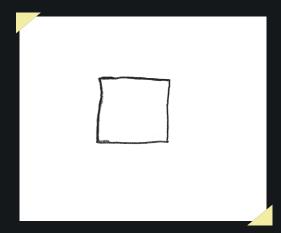
eedback:

Item appears in the game world with a custom design.
Used as intended, such as in combat or puzzle-solving.



# Drawing System Blueprint

**▼** Blueprint



▶ Type: Unlockable Resource

Blueprints are design plans used to draw special weapons, tools, or other items. Players collect blueprints to unlock different types of items that can be generated through the drawing system.

#### **1.** Functionality:

Item Unlocking

Each blueprint corresponds to a specific weapon or tool. Once collected, players can select the respective item in the drawing interface.

Permanent Use

Once unlocked, blueprints allow players to permanently use the respective items without consuming the blueprint itself.

#### 3. Blueprint Types:

**Weapon Blueprints:** 

Unlock various weapons like swords, pistols, rifles, and flamethrowers, each with unique drawing patterns and functionalities.

Tool Blueprints

Unlock tools like ladders, covers, and doors for environmental interaction and puzzle-solving.

#### 5. Interaction Feedback:

Pickup Sound:

A "paper unfolding" sound plays when a blueprint is picked up.

**HUD Update:** 

After picking up a blueprint, a "New Blueprint Unlocked" notification appears at the top of the screen.

#### 2. Acquisition:

**Ouest Rewards:** 

Obtained as rewards for completing specific quests. Enemy Drops:

Dropped by certain defeated enemies.

Hidden Locations

Found in hidden areas of the game world or through solving puzzles.

#### 4. Visual Representation:

Appearance:

Blueprints look like rolled-up parchment, showing item sketches when unrolled, with a yellowed, historical look. UI Display:

Unlocked blueprints appear in the drawing interface, while locked blueprints are shown as greyed-out silhouettes.

#### 6. Blueprint Usage Feedback:

Select Blueprint:

When a player selects a blueprint in the drawing interface, its outline appears on the canvas to guide the drawing process.

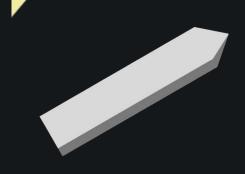
Successful Item Generation:

After the drawing is completed, the system generates the corresponding item based on the blueprint's functionality, and the blueprint remains usable.



## Drawing System Chalk Resource

Chalk



Type: Consumable Resource

Chalk is a crucial resource used for drawing patterns on the drawing canvas to create weapons, tools, and solve puzzles. Each piece of chalk represents a unit that is consumed upon successful use.

#### **1.** Functionality:

Drawing Items

One piece of chalk is consumed every time the player successfully draws and generates an item (e.g., weapons, tools).

Puzzle Solving:

Chalk can also be used to draw specific symbols or shapes to solve environmental puzzles.

#### 3. Usage Restrictions:

Maximum Capacity

The player can carry up to 100 pieces of chalk at a time. Excess chalk found in the environment will not be picked up if the maximum limit is reached.

Players cannot enter drawing mode or use certain abilities if they have no chalk left.

A warning message will be displayed when attempting to draw without enough chalk.

#### **5.** Interaction Feedback:

Pickup Sound:

A light "chalk snap" sound plays when a piece of chalk is picked up.

**HUD Update:** 

When chalk is collected, the HUD updates to reflect the new quantity with a "+1 Chalk" notification.

#### 2. Acquisition:

**Environmental Pickup** 

Found scattered throughout the game world on desks, shelves. or other surfaces.

**Enemy Drops:** 

Dropped by defeated enemies as a reward.

#### 4. Visual Representation:

Appearance:

A small, white chalk stick, slightly worn with visible use marks.

UI Indicator:

Chalk quantity is displayed in the HUD, typically in the top-right corner, showing the current count out of the maximum (e.g., 5/10).

#### **6.** Chalk Usage Feedback:

**Consumption Sound:** 

A soft "scratching" sound plays when chalk is used on the drawing canvas.

Visual Feedback:

The HUD displays the current chalk count, and a small animation shows chalk being reduced in the inventory.



### Puzzles

### **Small Puzzles**







### **Bridge Puzzle**



### Small Puzzles

The player must use the Door Blueprint to bypass rubble blocking a riverside roadway by creating a portal-like door.

#### Puzzle Location:

- Setting: A narrow road along a river, blocked by debris from a collapsed building.
- Objective: Reach the other side of the obstructed road.

#### Puzzle Steps:

- 1. Introduction: The player encounters debris blocking the road.
- Finding the Blueprint: The player discovers a fallen ally's body near the rubble, containing the Door Blueprint.
- 3. Blueprint Tutorial: A tutorial explains how to draw and use the Door Blueprint to create a portal.
- 4. Drawing and Placing the Door: The player draws the door and places it in a clear spot, creating a portal.
- 5. Using the Door: Approaching the door teleports the player to the other side of the debris.

#### Additional Elements:

- Hints: On-screen prompts guide the player.
- Challenges: Finding the correct placement for the door on the narrow road adds difficulty.
- Cues: Visual and audio effects highlight the door's functionality and teleportation process.

Throughout the game, players will encounter a variety of similar puzzles, such as using the Ladder Blueprint to climb towers or the Box Blueprint to block doors and navigate obstacles.

### Bridge Puzzle

#### Tower Design:

- The tower design remains simple, serving mainly as an object for climbing. Players will draw ladders to gradually ascend, and the tower itself doesn't need complex decorations or multi-layered structures.
- Players use their ability to draw ladders to climb upward step by step, aligning with the core game mechanic of "drawing things into reality."

#### Bridge Repair Mechanics:

- Bridge Fragments: The broken bridge could have various missing pieces, each with its own unique shape and level of difficulty. From the top of the tower, players will have a view of the entire bridge, allowing them to draw the missing parts directly into place.
- Drawing Feedback: As players draw the missing segments, there could be a real-time feedback system. If a piece is drawn incorrectly, it could glow red or warp, hinting that adjustments are needed before it can fit correctly.

#### \_Player Abilities:

- Energy Limitations: To increase challenge, the drawing ability could be limited by an energy meter. Each time the player draws a part of the bridge, they consume energy, encouraging them to plan their actions carefully and avoid wasting resources.
- Physics-based Repair: The repaired bridge must follow certain physical rules—players can't just draw anything. The structures need to be stable, so the player will need to consider balance, gravity, and support when designing the missing parts.

#### \_Visuals and Atmosphere:

Scenic View from the Top: Once the player reaches the top of the tower, design a breathtaking view of the surrounding world, showing the full bridge and where it leads. This can provide a visual payoff for reaching this point.

### Screen UX Flow

