

**BACK TO**  
**BLACK MESA** 

LDD - WIP - V1.2

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## Story

After fleeing Ravenholm and reaching the next rebel outpost, Gordon Freeman is introduced to Dr. Colette Green, his former colleague from their days at Black Mesa.

After catching up, telling how their paths were after they escaped from Black Mesa, Doctor Green mentions that there were still Xen crystals in the old Black Mesa facility. One way to stop the Combine would be to use the crystals with their teleportation effects.

They then decide that Gordon Freeman must return to Black Mesa in search of possible specimens of the Xen crystal that still exist.

Upon arriving in Black Mesa, Gordon Freeman finds a facility very different from the one he fled decades ago. Once a technology-flooded facility, Black Mesa was now tamed by nature, which found shelter amid its wreckage.

With several problems in the electrical installations due to the old disaster and the finger of time, Freeman needs to find another way to enter the old facility.

Inside, nature keeps spreading, but now with an unusual inhabitant. The aliens brought from Xen have found amidst the nature in the new old Black Mesa, not just a shelter but also a home.

Now, Gordon Freeman must find a way to get past them and reach the former test chamber of Sector C Test Labs.



## Environment

The game takes place on the premises of the former Black Mesa.

Black Mesa was an American research company based at the Black Mesa Research Center in the desert of New Mexico.

Black Mesa was apparently administered by the US government, as the Great Seal can be seen in various lobbies of the Black Mesa Research Center and the US Nuclear Regulatory Commission, as seen in various communicator status screens from previous games.

Black Mesa conducted research in a variety of fields, from standard scientific research to radiation, rockets, theoretical physics, lasers, experimental propulsion, hydraulics, robotics, hydroelectricity, genetics, zoology, applied mathematics, and a wide spectrum of research in chemistry and all types of research in physics. The research was conducted primarily at the Black Mesa Research Center and includes pure research and applied science.

In addition to these legitimate researches, several secret projects were also carried out at Black Mesa, something deliberately left vague. Much classified research was carried out, including the development of high-tech weapons and defense systems, research on extra-dimensional travel, teleportation, and the study of Xen.

After the Half-Life 1 incidents, the Black Mesa facility was left abandoned. Being consumed by vegetation, suffering from flooding and structural collapse. The installation's energy is scarce and few points still have electric energy. Some survivors of the events of Half-Life 1, such as aliens from Xen, managed to survive in the facility over the years by adapting to terrestrial life.

## Settings

Black Mesa interior, abandoned ten years after the events of Half-Life 1.

Tense atmosphere, dark environments and poor lighting. Feeling of abandonment, vegetation growing and spreading in the abandoned utilitarian parts.

Hastily abandoned laboratories. Warehouses and corridors with marks and traces of despair and conflict caused by the events of Half-Life 1.



# Characters

## Gordon Freeman

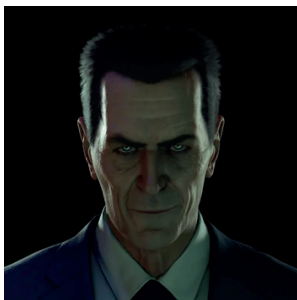


- Protagonist
- 27 years-old

Dr. Gordon Freeman is the main protagonist of the Half-Life series. Freeman is a theoretical physicist, forced to defend himself and the human race in a conflict against hostile aliens and other enemies after a failed experiment causes a worldwide alien invasion.

In the process, Freeman becomes an almost legendary resistance hero, eventually rising to be one of the key leaders in the war against an inter-dimensional empire.

## G-Man



- Supporting Character

The G-Man is an enigmatic and mysterious character that appears in nearly every title of the Half-Life series. Referred to as a "sinister interdimensional bureaucrat," he is known to display peculiar behavior and wield superhuman powers.

The G-Man's identity and motives remain unexplained. His allegiance is also unknown to this day, although he and his Employers are apparent enemies to the Combine and are seen as a threat by them. Playing the role of an overseer and eventual employer, he often appears in odd and unreachable places, observing Gordon Freeman and other characters, periodically aiding or hindering them.



# Enemies

## Headcrabs



- Parasite
- Xen wildlife

## Zombie



- Zombie
- Xen wildlife

## Overwatch



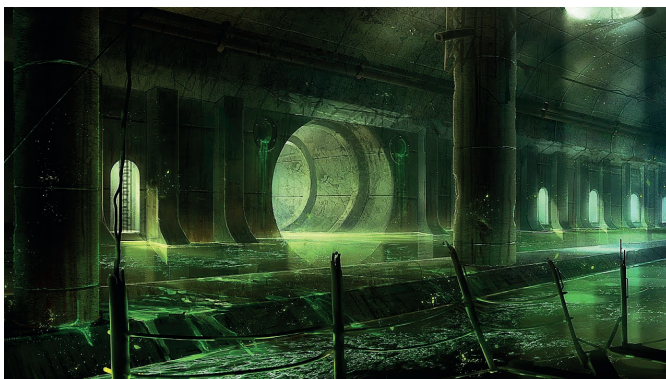
- Sub-Imperial Military
- Combine





# References

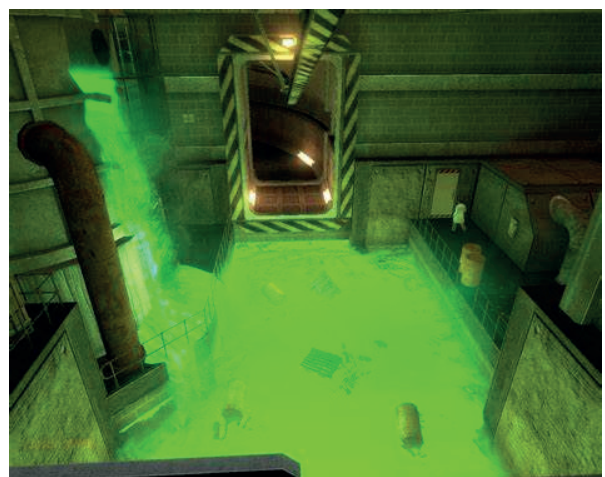
## Ambience







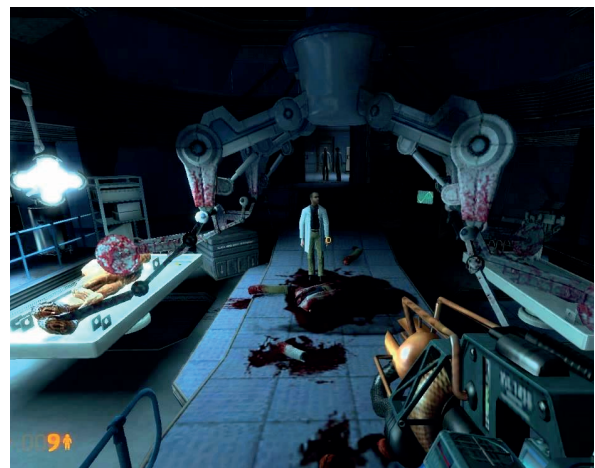
## Black Mesa Original Facility







## Black Mesa During the Incident





# Program

## Gameplay Pillars

### ■ FPS Basics

- Camera movement
- Player movement
- Jump mechanics
- Crouch mechanics
- Shooting mechanics

### ■ Weapons

- Crowbar
- Shotgun
- Gravity Gun
- Tau Cannon

### ■ Life Support

- Health charger
- HEV charger

### ■ Environment

- Wood containers
- Toxic ponds
- Elevators
- Mechanical doors

## Gameplay Pillars

■ Plataform puzzles

■ Fun exploration

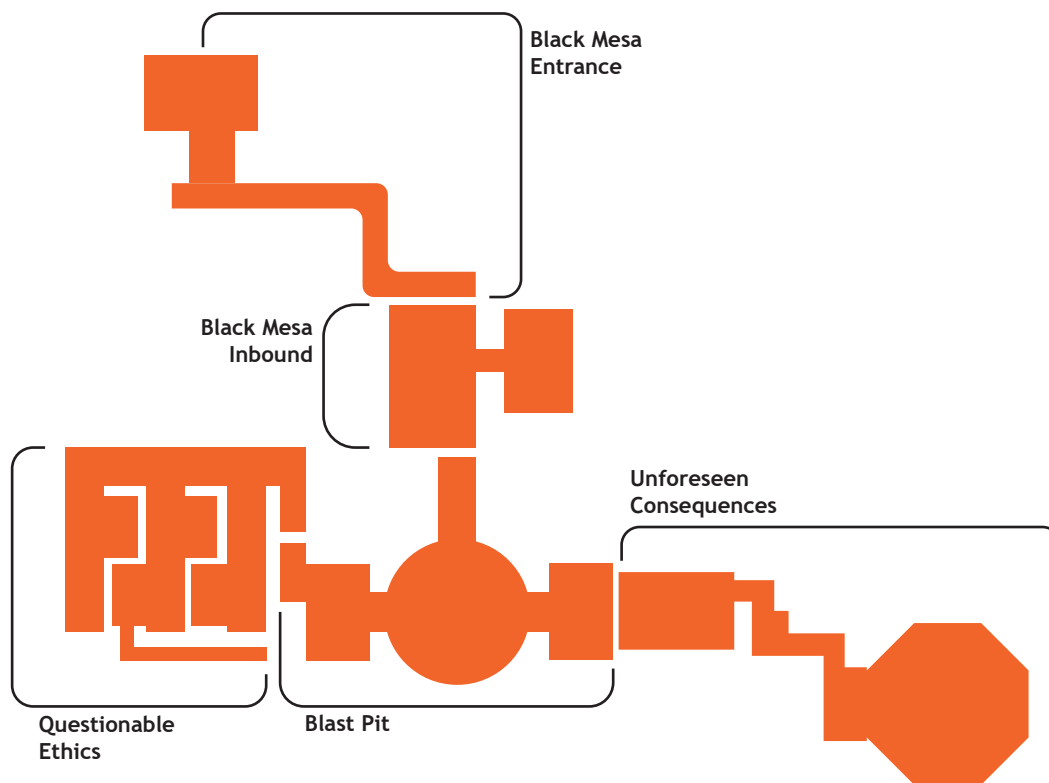
■ Nostalgia



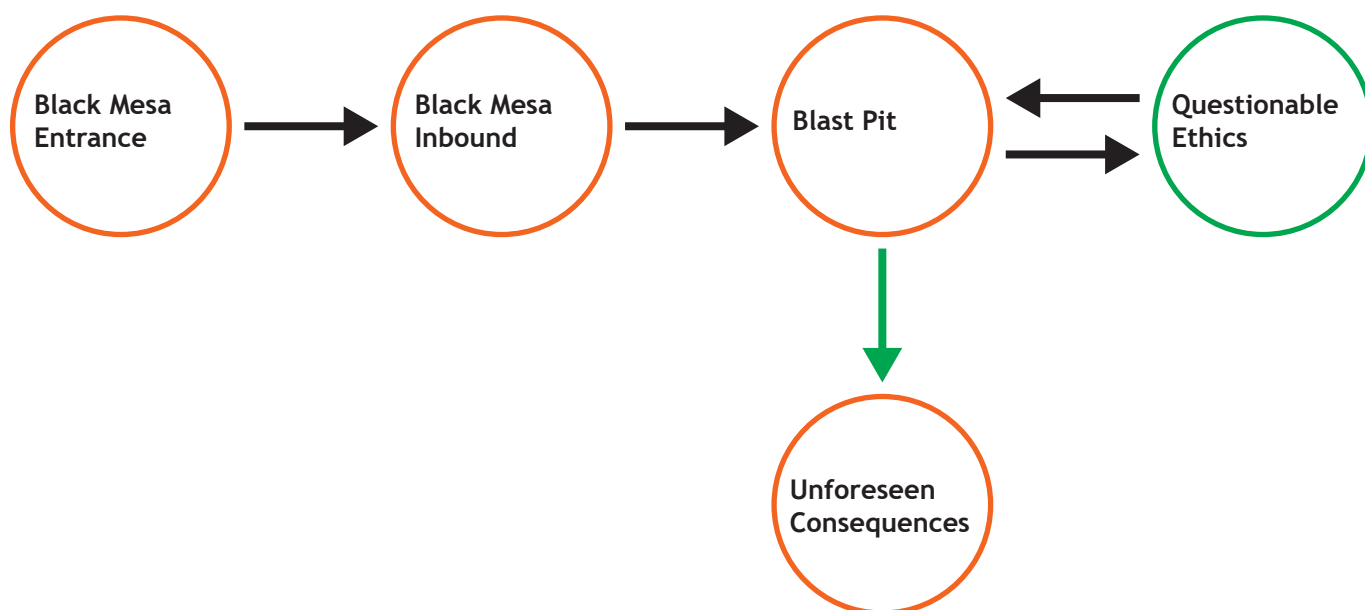


# Diagrams

## Layout

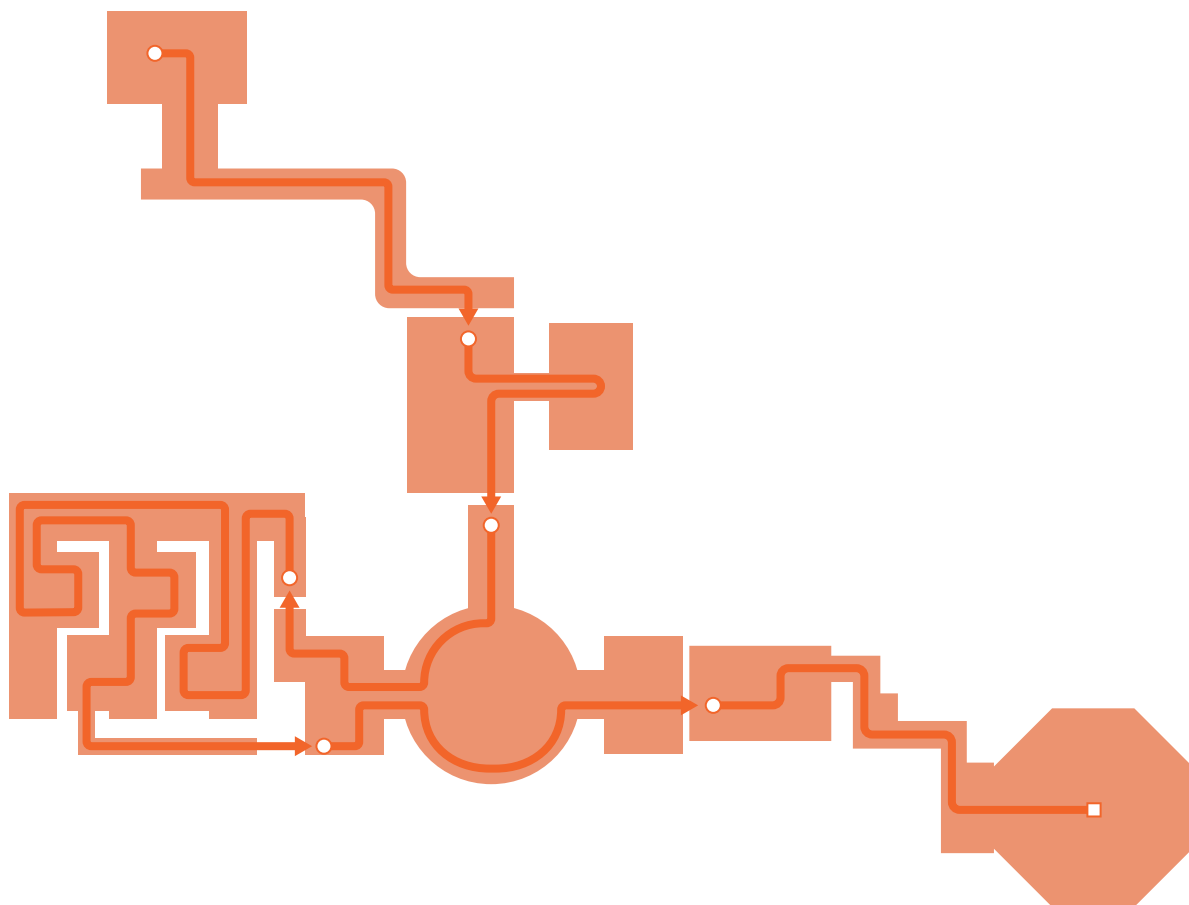


## Flow - Bubble

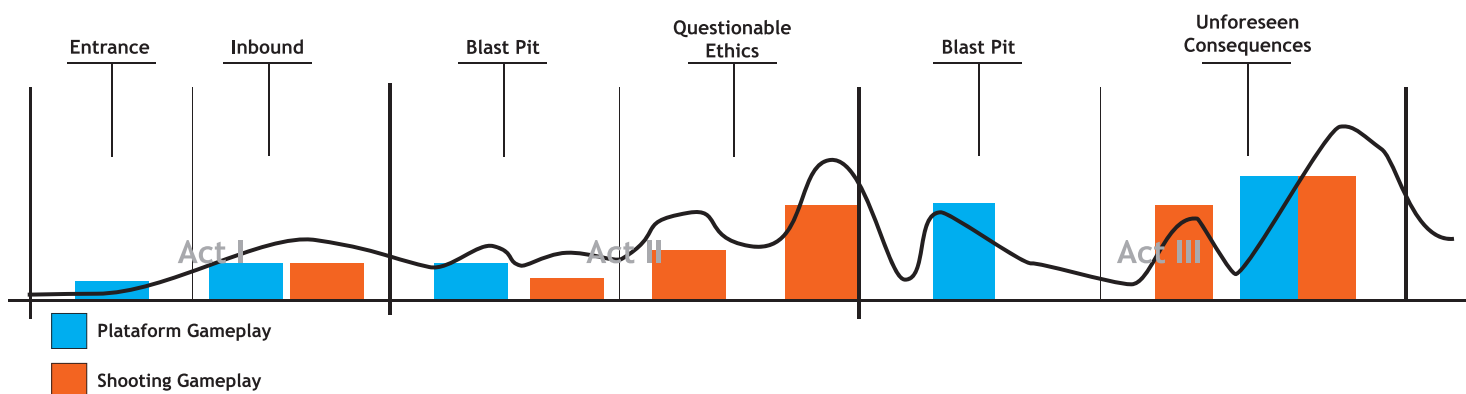




### Flow - Parti



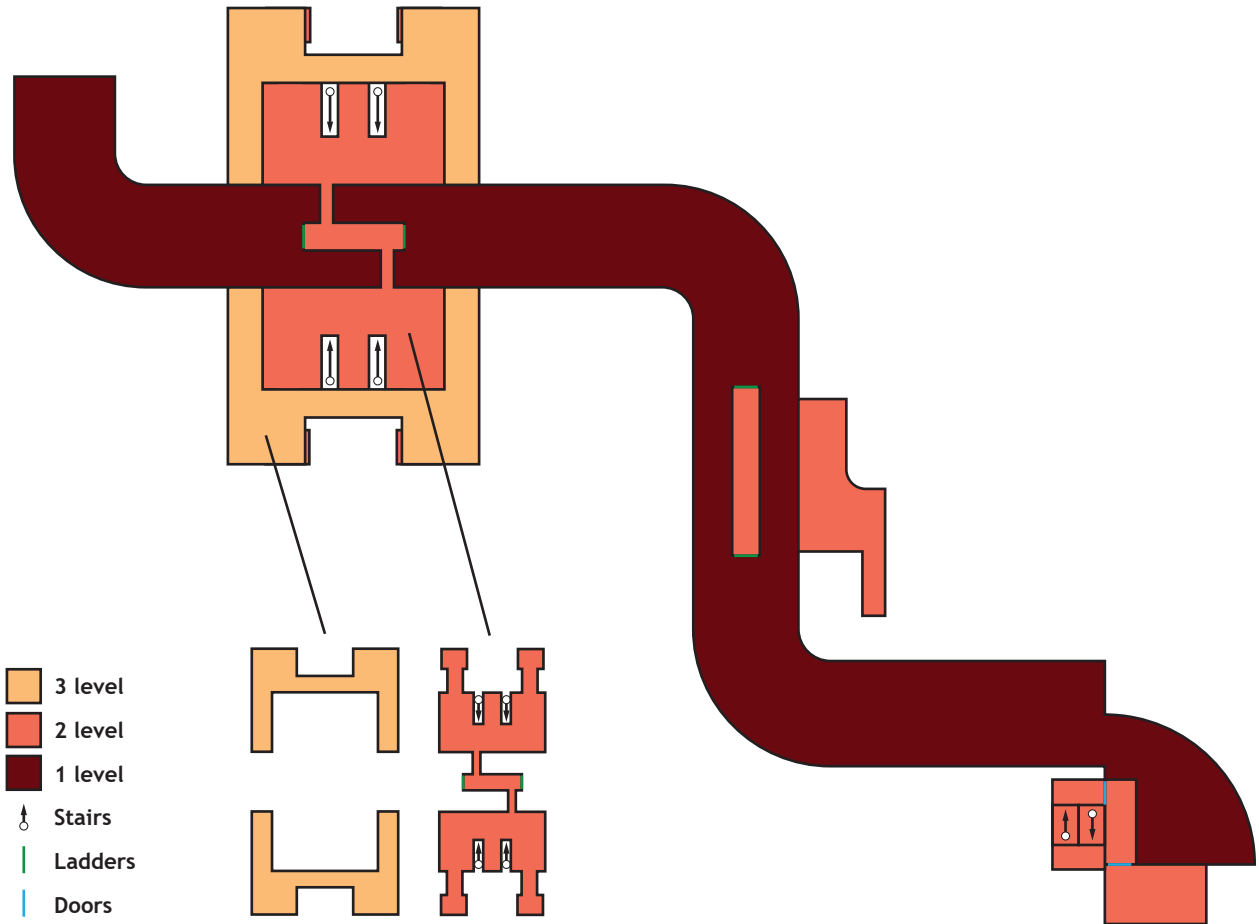
### Beat



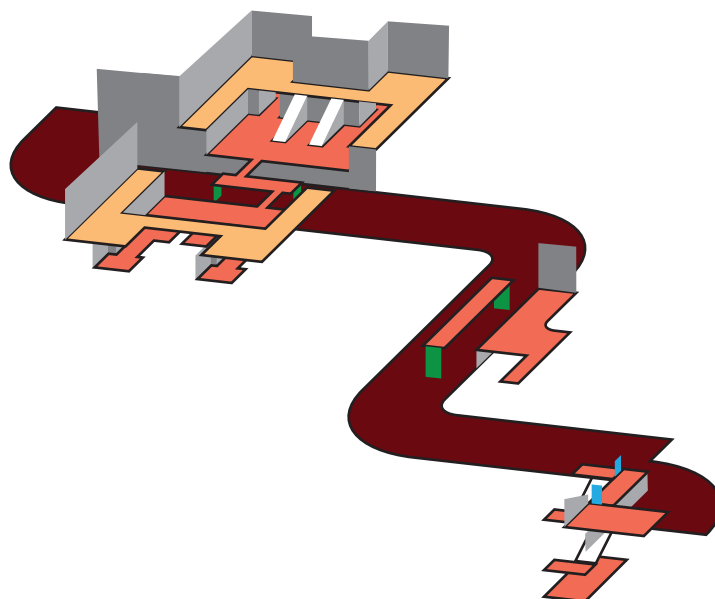


# Maps

## Black Mesa Entrance Topview

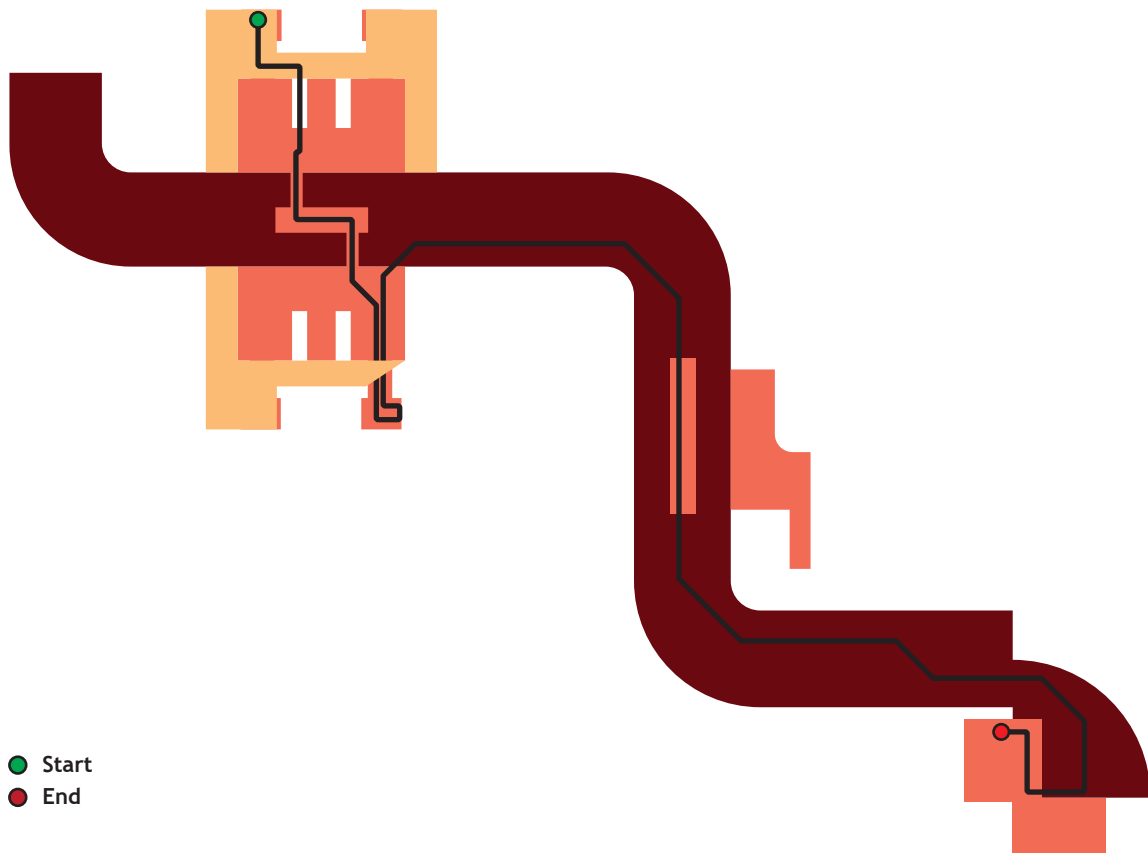


## Black Mesa Entrance Isometric

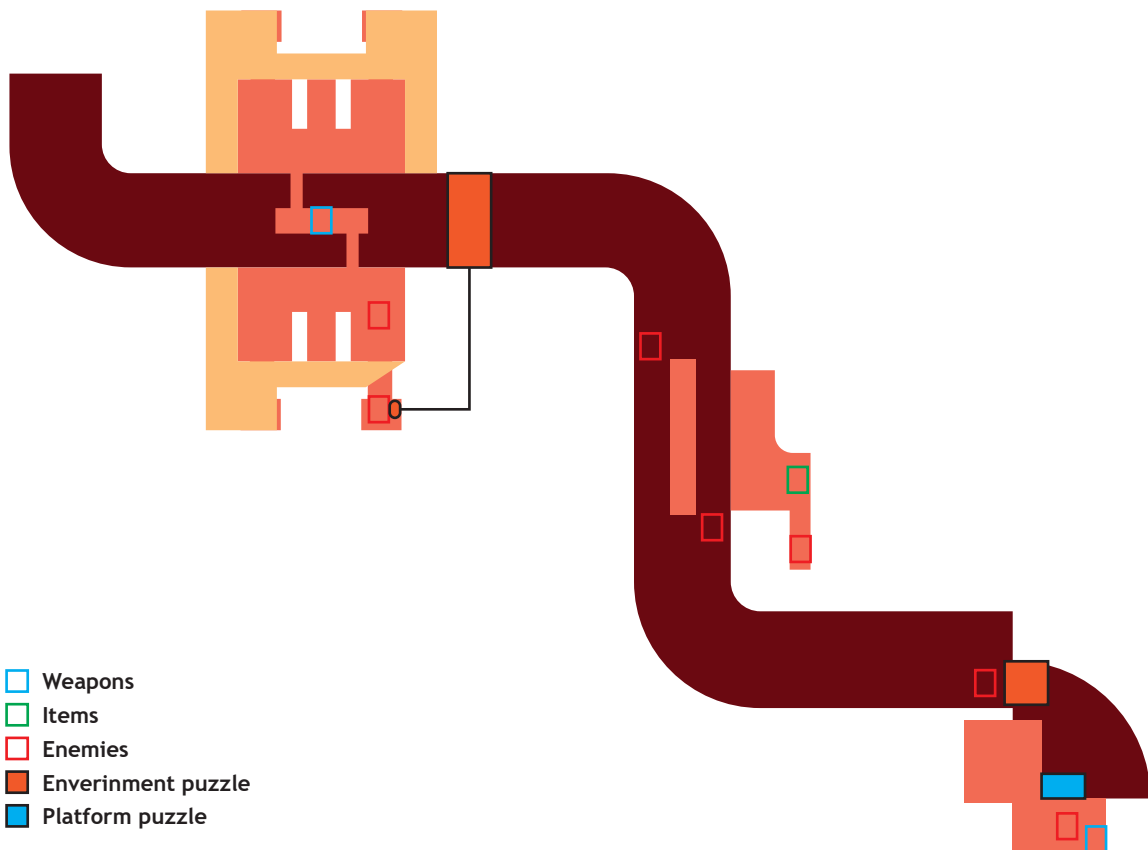




## Black Mesa Entrance Player Flow

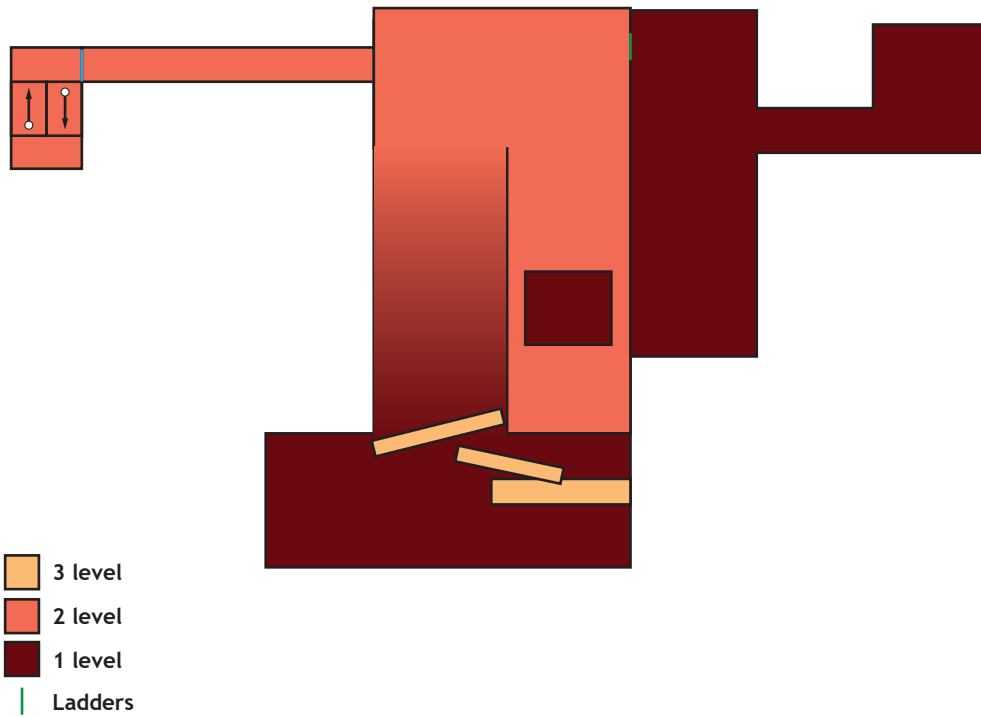


## Black Mesa Entrance Interaction Points

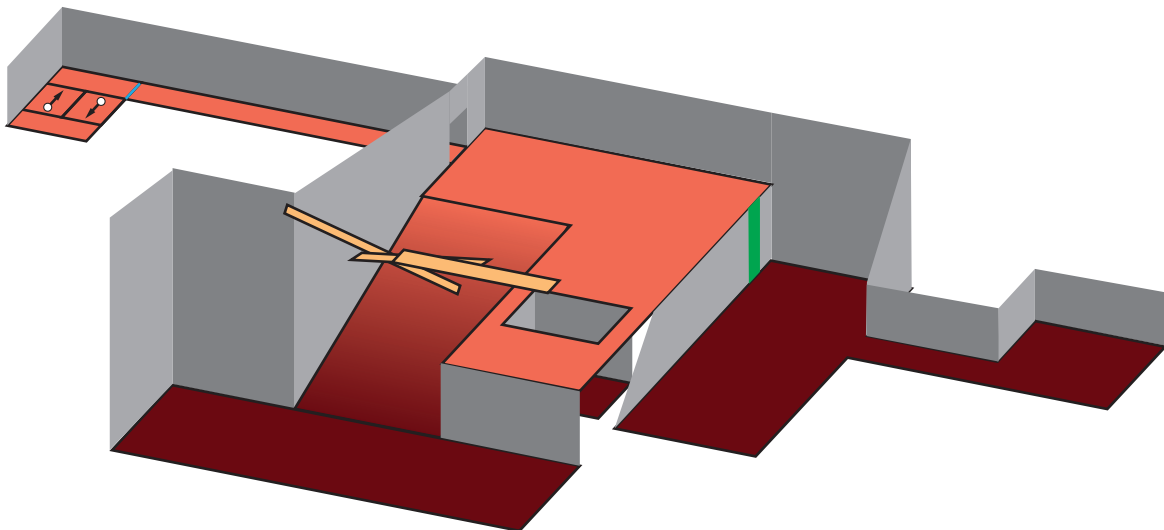




## Black Mesa Inbound Topview

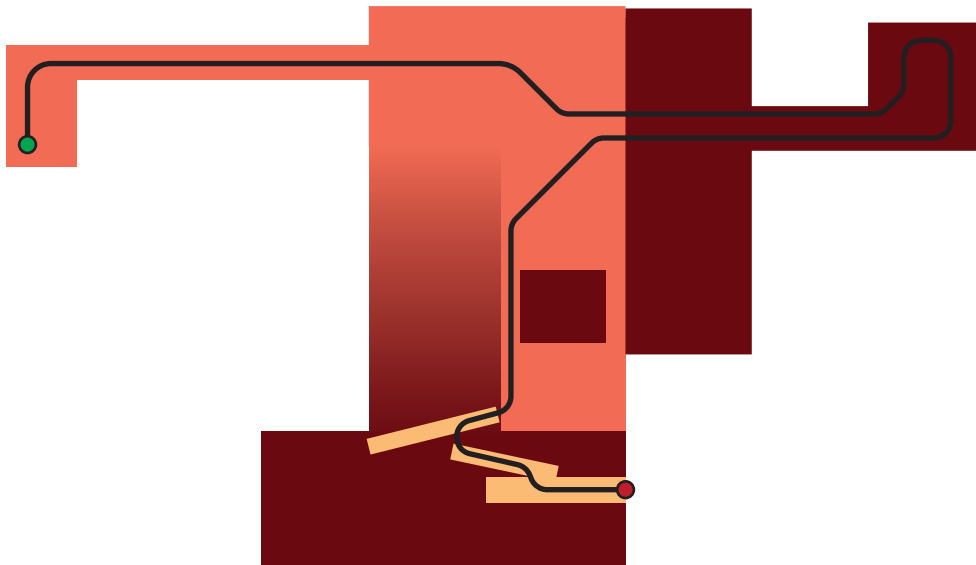


## Black Mesa Inbound Isometric



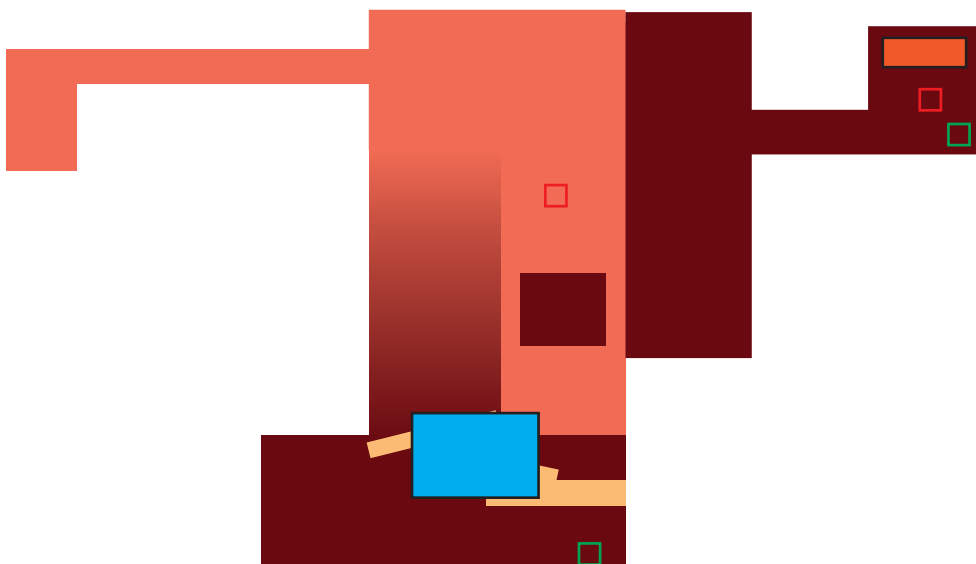


## Black Mesa Inbound Player Flow



- Start
- End

## Black Mesa Inbound Interaction Points



- Weapons
- Items
- Enemies
- Environment puzzle
- Platform puzzle



# Schedule

## Asset list

base	sandground
base	earthground
base	concrete
base	brickwall
base	metalwall
base	greymetal
base	flatwall
base	watersurface
base	toxicliquid
base	metalplatform
detail	qe_ladder
detail	metal_notches
detail	power_cabinet
detail	floodlight
detail	metaldoor
detail	glass
detail	electricalbox
detail	rail_support
detail	wallmonitor
detail	railing
hero	monito_box
hero	vendingmachine
hero	inbound_tram
hero	escalator



# Schedule

## Agenda

Week 5	LDD first version
Week 6	Playtesting
Week 7	Reading Week
Week 8	Design Week
Week 9	LDD updates based on feedback
Week 10	Usability test
Week 11	Implement colour and light
Week 12	Playtest
Week 13	LDD final version
Week 14	Graybox final version