

## Day #2 Field Judge's Problem

### FAB

Communication cable can be strung out prior to starting the clock, if the team has a CCA, the Visio mapping device will be up and running with the SD card in place during this time. Teams should have the option to ask for 3 paper maps if they request. No other work is allowed at this time by the team until the clock is started.

The captain will line up with team and introduce himself along with the team.

After instructions, and the statement has been given by the mine manager, the captain must start the clock, and write correct month, day, year, and draw position on the date board. At this time the blank maps will be given to the team.

A statement needs to be made to the judges about having non sparking tools due to the mine being gassy.

### Entry Checks

Teams can conduct examinations in any of the openings at the FAB that they want after the clock is started. RT, DI, and GT must be made in all the 6 openings. The 3 entries inby and the 3 entries outby. The #2 entry has a cave with an explosive gas that will stop team's travel. Teams need to perform proper RT, DI, and GT. In addition, the explosive mixture must be called out to the FAB.

### Team Stop(s) #1/2/3/4/5/6

Teams can advance up the #1 entry or the #3 entry. Teams must conduct their 50' check at this stop. If the team elect to travel up the #1 entry, they will find an airtight cave in XC B to the East. RT, DT, and GT are required at the opening inby and to the East at this stop. If the teams advance up the #3 entry, they will find a person unconscious lying in the unsafe roof. Teams cannot recover the person at this time. RT, DI, GT are required inby XC B and to the West

### Team Stop(s) #2/3/4/5/6

Teams have a lot of options on where they would like to explore, but there are some highlights that need discussed. RT, DT, and GT are required at all openings once explored by the captain. Just inby XC C #2 entry teams will find a smoke placard, the placard needs to be on the plane so the team will have to attach their line prior to breaking the plane and entering the smoke, smoke check must be conducted prior to entering. The shuttle car on Fire and Intense heat placard should not be identified at this time. This placard may need to be turned upside down to prevent the teams from visually seeing this until team stop 8. In addition, teams must not explore inby XC C 2X3 rule until all XC B has been tied in. The Barricade in XC B #2 entry has a barricade with irrespirable and explosive gas, the explosive gas must be called back to the FAB. Once the captain touches the barricade there will be a response from the patient Help, Help its airtight behind me. After team stops 1-6 have been completed teams have enough materials to ventilate and enter the barricade, if they don't, teams will be discounted for exploring beyond a survivor. Please see the first ventilation solution for proper builds. Teams will need to make proper gas checks on the way out of the mine.

### Barricade in XC B

Teams do not have to airlock due to the response from the patient. Once inside the barricade team will have to conduct proper RT, DI, and GT's. Bruce has no injuries but is in irrespirable air, so must be protected from the atmosphere.

### Team Stop(s) #7/8/9

Teams have the option again to travel either one of these entries. RT, DI, and GT need to be conducted on all openings, faces and at barricades. If the team travels to XC D #1 entry captain must DI the body and retrieve the timber and retreat back to the patient in the unsafe roof in XC A-B in the #3 entry. Once the captain timbers into the person, Bob has no pulse and now is a body, if a prior DI was not conducted by the captain on initial exploration, then a DI is required now. If the team traveled up #3 entry XC D and finds the barricade, they will find an explosive gas that must be called out to the FAB. There will be no response behind the barricade.

### Team Stop 8

RT, DI, and GT required at this opening where a smoke placard will be found. Smoke check must be conducted by the team, and team must attach their line prior to entering. If the shuttle car on fire and Intense heat placard has not been turned over, it needs flipped prior to the team getting to it. Team must without undue delay either regulate the fire or build a temporary stopping on both sides of the entry where the fire is located. Once 7-9 team stops have been done teams can now ventilate the irrespirable and explosive gas out from in front of the barricade. Please see 2 ventilation solution for proper ventilation and builds. Reminder the installed line curtain in the #1 entry must be dropped prior to requesting a ventilation change, if this is not done the explosive will be sent over the battery scoop.

### Barricade in 3 Entry

Teams must airlock prior to entering the barricade due to no response from Brad. Team finds Brad unconscious with no injuries. Teams should be able to bring Brad out on a stretcher with any respiratory protection. RT, DI, and GT are need for the face, and at Brad's location. Proper gas checks for ventilation change should be conducted on the way out of the mine. Once the teams reach the surface they will count off, stop the clock, and turn in their maps, and SD cards if using a CCA.

THE END!

## Loveland Day #2 TEAM BRIEFING

Thank, you for responding to our emergency here at the Big Dig Pete Mine day #2. As we discussed yesterday during our briefing there were 9 miners missing, today we still have 5 miners uncounted for. I wish we had better news but unfortunately, at this time we still have not had any communications with any of the missing miners.

You are currently standing at our newly established FAB that was constructed underground from our last exploration team earlier this this morning. As discussed from yesterday we are a multi-level room and pillar Trona Mine that operates at the 500-foot level. We produce ore 24 hours a day 365 days a year. We are classified as a category 3 mine in which noncombustible ore is extracted which liberates a concentration of methane that is explosive or can form an explosive mixture with air or have the potential to do so based on the history of the mine or the geological area in which the mine is located. There is still potential to see problems with water, gas, and incompetent back, so be careful.

We have been having problems with our main mine fan since the explosion yesterday, so we have established a blowing fan just outby the #2 entry off the FAB. The blowing fan cannot be stopped, stalled, or reversed at any time. Currently the air is splitting at the FAB and is going out the #1 and #3 return entries.

The dimensions of our pillars are 15 feet by 15 feet with 10-foot entries, and crosscuts. There are no explosives stored anywhere on surface and none stored underground.

All federal and state agencies are still here from yesterday and again have approved our exploration plans and have granted us approval to send teams underground.

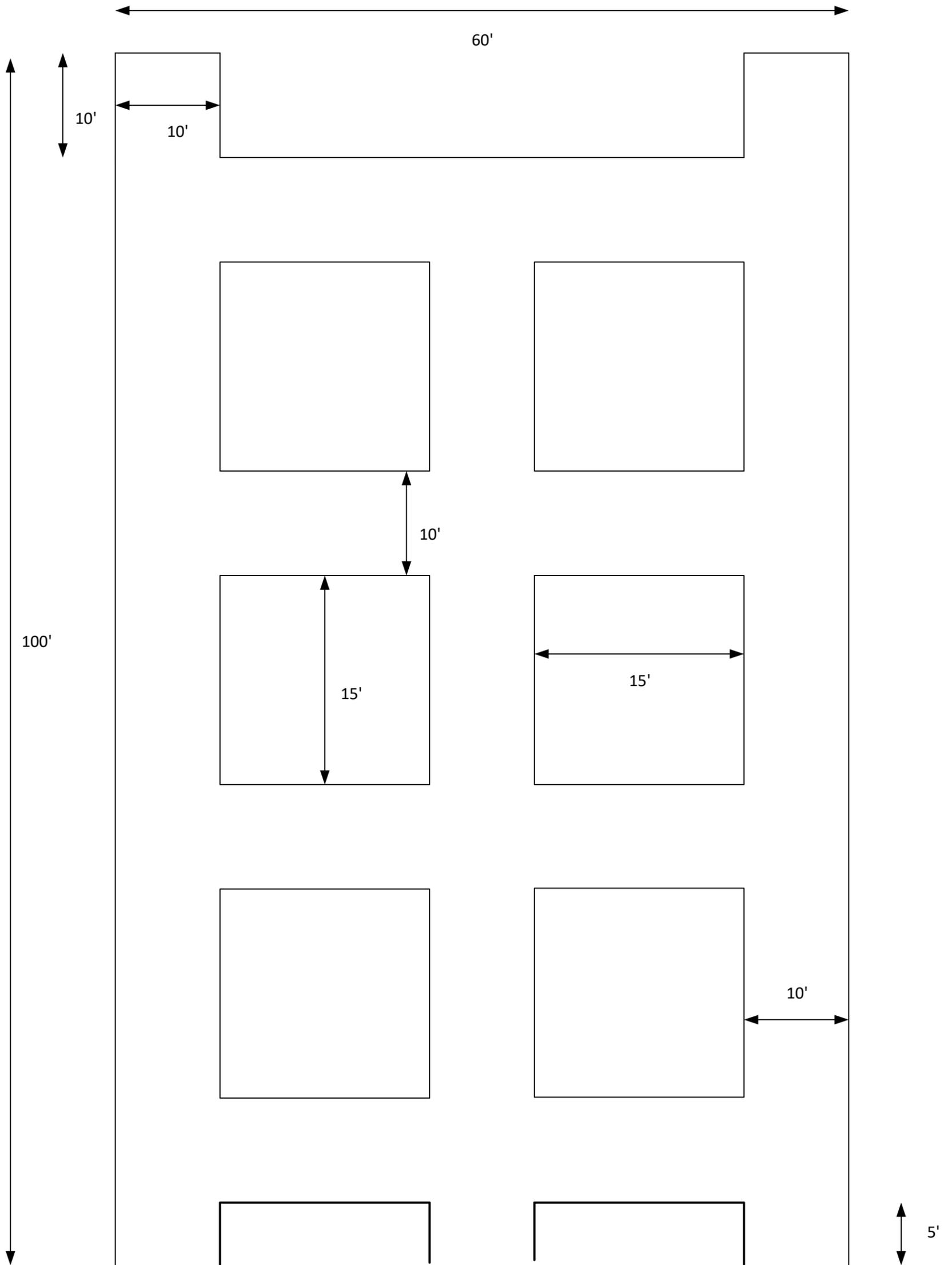
All the mine maps are current and up to date.

### **Objective:**

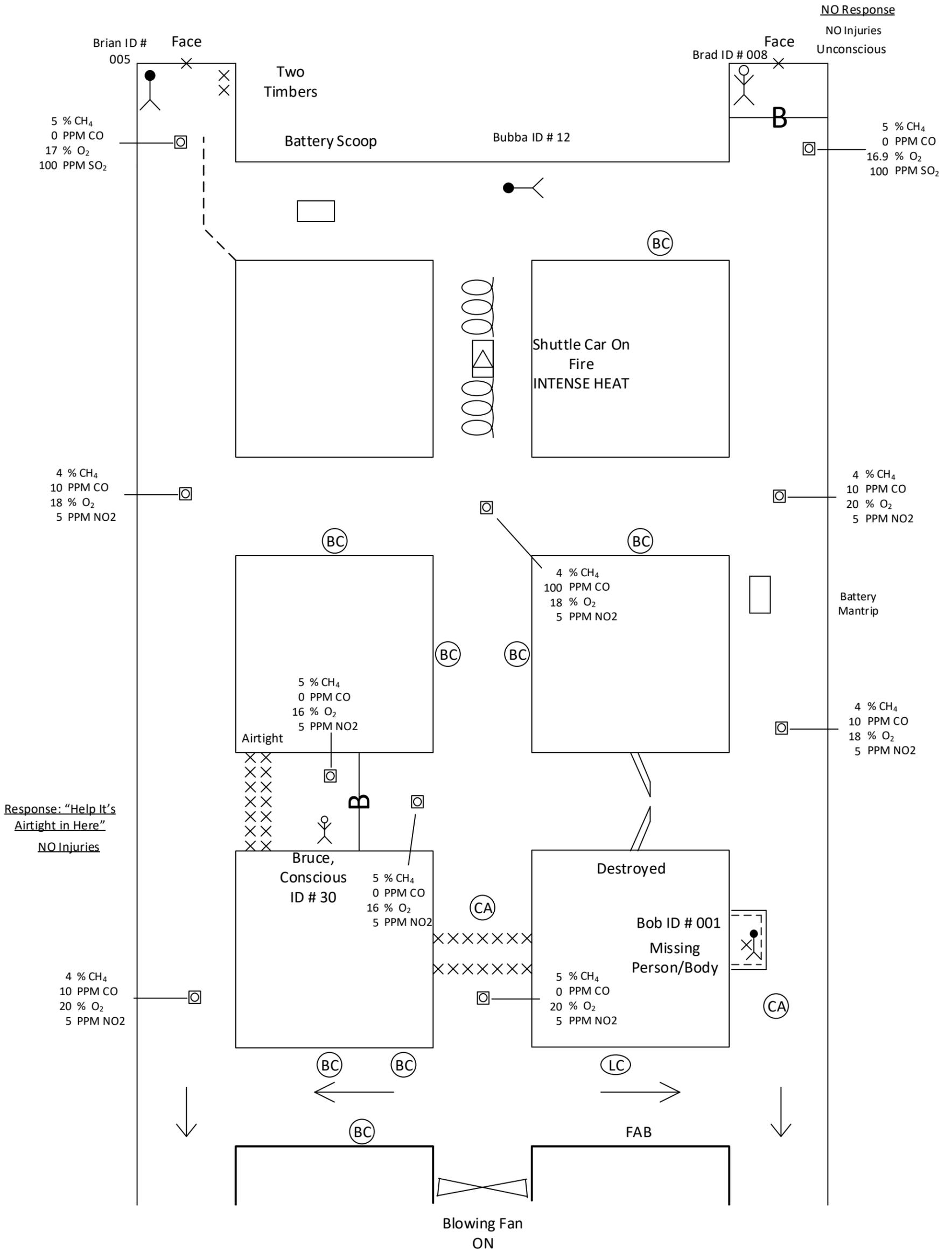
- Explore all accessible areas of the mine that can be done safely
- Extinguish or seal all fires
- Locate all missing miners
- Bring all survivors to the FAB
- Your Team has 90 minutes to complete this problem (5 minute warning)

**Please be careful and good luck!!**

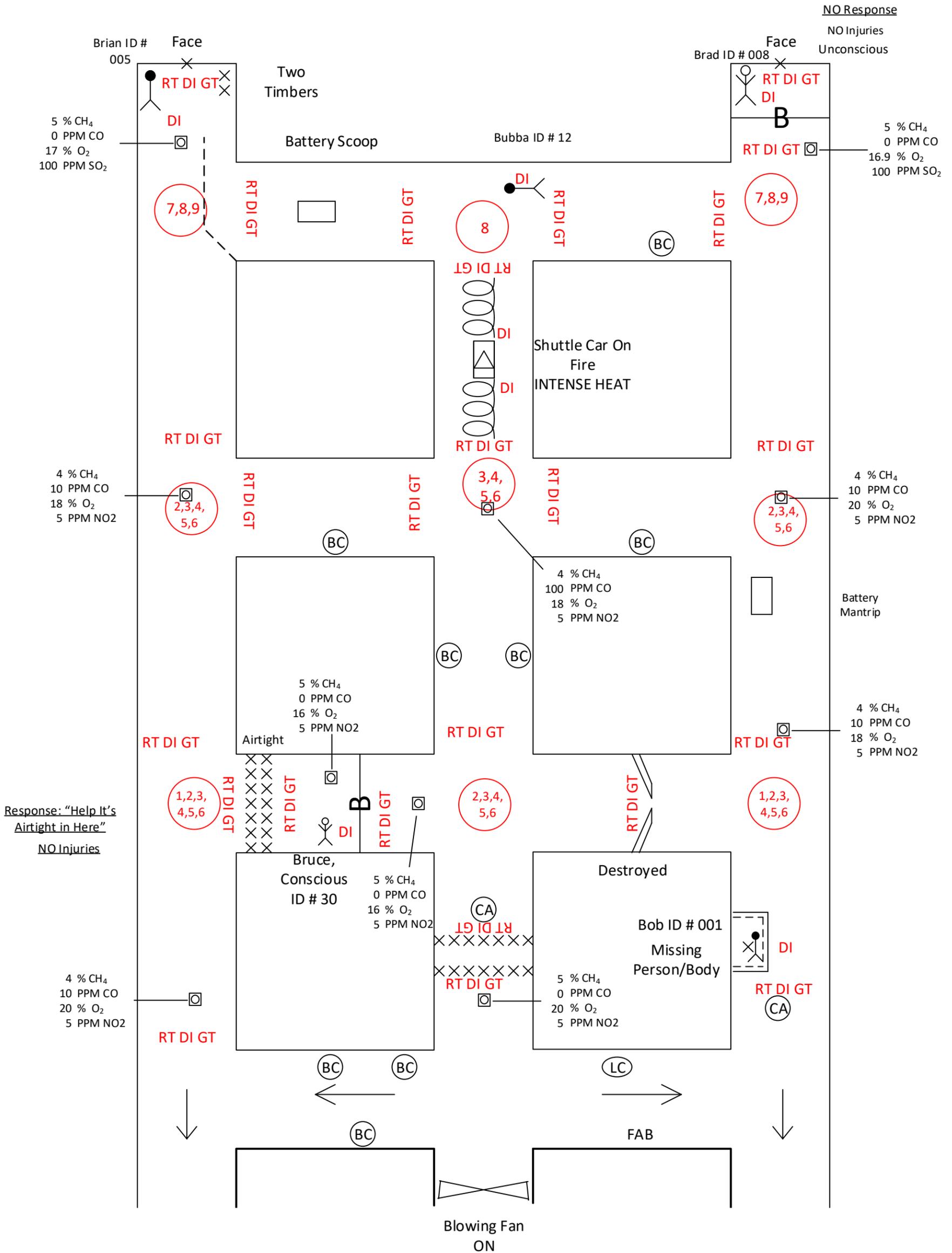
Materials  
BC/Stoppings: 11  
Elongated objects: none  
Unsafe roof/rib markers: Red-6  
Misc: 2 x 20' LC, 2 timbers  
57 placards



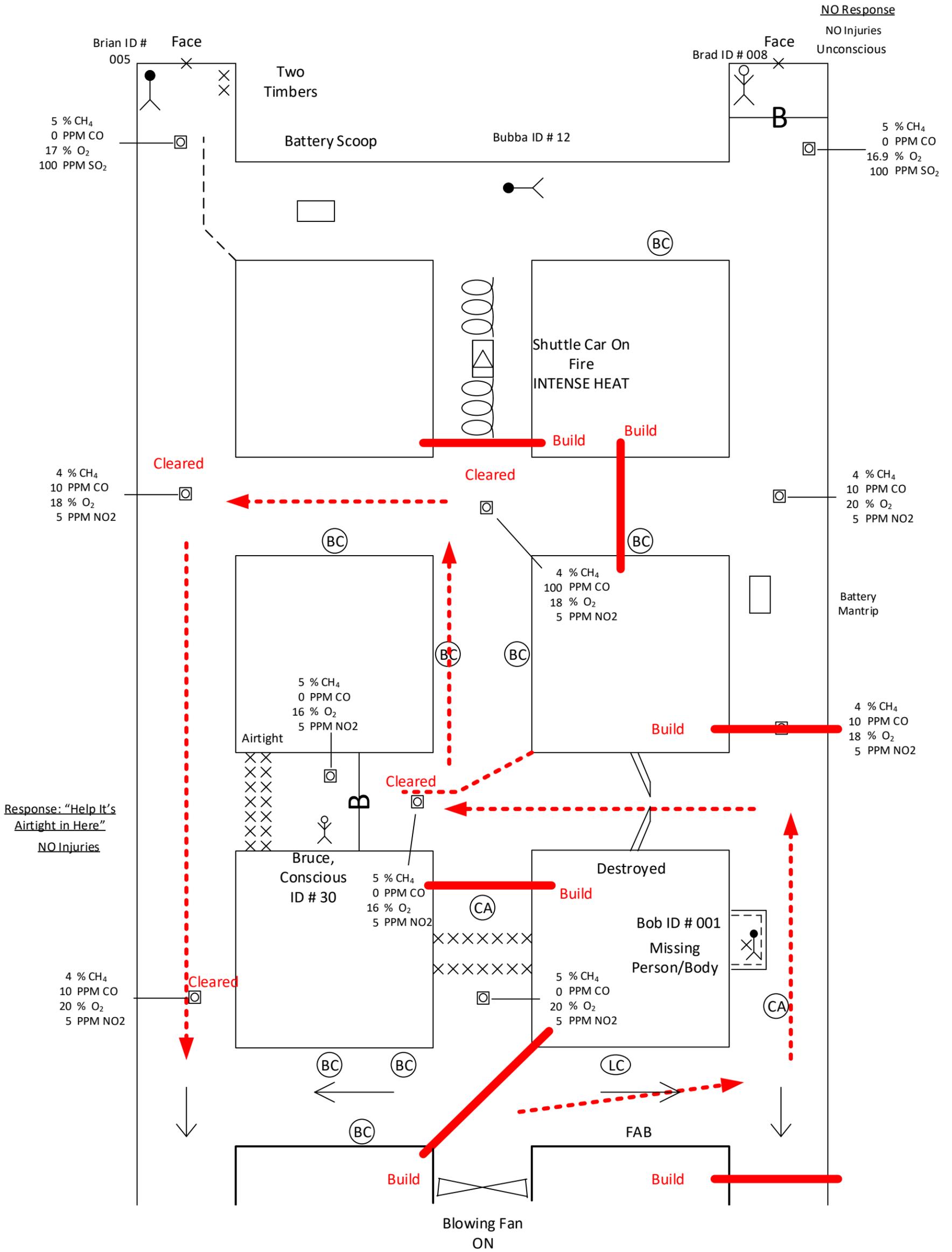
2022 Loveland CO  
Day 2  
PROBLEM MAP



Judges Map



# VENT 1



# VENT 2

