

The Elephant Facility

The elephant facility consists of a barn and an exhibit area. The barn contains an employee work and storage area, two smaller stalls (14' x 28'), one large stall (28' x 28') with PC work area, and an access tunnel with the Restraint Chute. Layout diagrams are in the Protocol appendix. The exhibit contains a large (approx. 34,000 gal) pool with waterfall, ¼ acre contoured land area with concrete apron by pool and dirt substrate, a tree ring, and a perimeter wall providing shelter and rubbing surfaces. Shade is available due to the north exposure along parts of the perimeters throughout the day as well as inside the east tunnel which is accessible while the elephants are outside. Fresh water is available through sprayers along the pool perimeter.

Due to the mild climate, the elephants can be outside every day and are left out at night almost all year with barn access. Only a few nights each year are cold enough to require locking them in overnight. Details on housing during different seasons is in the shifting routines in the Protocol appendix.

The Elephant Staff

The Elephant Staff consists of one Elephant Manager who also serves as a Primary Elephant Keeper, two additional Primary Elephant Keepers, and two Relief Elephant Keepers. All of the keepers must be cleared by the Elephant Manager for any procedures they will be performing.

The Elephant Manager is responsible for training the staff, developing training programs and maintaining consistency, and communicating with management about the program.

Primary Elephant Keepers are assigned to the Elephant Area for the majority of their time. They should be proficient in all aspects of elephant care. They may also train other keepers in the area as approved by the Elephant Manager.

Relief Elephant Keepers are fully trained Elephant Keepers who are scheduled in the Elephant Area at least 2 days per week.

A breakdown of the responsibilities of the Elephant Keepers is contained in the form in the appendix of this protocol.

Training New Staff

New staff may be assigned to the Elephant Area only with approval of the Zoo Management and Elephant Manager. Compatibility with the elephants and existing staff as well as an ability to work as part of a team are important considerations in determining who can work the elephants. New keepers must familiarize themselves with the procedures and policies of this protocol, terminology and training systems used, and the elephant's identification before they begin any direct interaction with them. All staff training will be done under the supervision of the Elephant Manager or one of the other Elephant Keepers who have been approved to provide that training. They will initially be responsible for delivering rewards without giving any commands while the elephants' reactions to them are observed. If the elephants react well to their presence, simple commands can begin to be given. Next, remote behaviors will be worked on which will allow the new keeper to develop a relationship with the elephants and to start to refine their training abilities. The time to develop a good relationship with the elephants is very

incidents are addressed in post-training discussions immediately following the session.

Our program is Protected Contact so no one should be in the same space as the elephants, however, accidents happen and the public has gone over barriers at other facilities. For situations where a person is in with the elephants, follow the Zoo's emergency procedures. Remember that you should not place yourself in a situation where you will end up adding to the problem. Keepers can use CO2 extinguishers, hoses, and anything that might distract the elephants in the barn in order to try and distract the elephants while emergency crews are mobilizing. Barn doors can also be configured to allow human escape without letting the animals through. Keepers also carry pepper spray if the situation is close enough to use it safely. Follow all Zoo protocols to try to resolve the situation safely. Emergency Protocols are in this Protocol's appendix section.

In the event that one elephant is exhibiting aggression which is endangering another, the barn doors and gates can be used to try to give the victim an escape. Extinguishers and other distraction items can be used to try to allow escape. Do not place yourself into any dangerous situations. Future housing adjustments may be necessary to keep elephants apart who fight too much. This situation has not been seen with these elephants but did occur in 1988 when our maturing bull attacked our geriatric female. They were separated from that day on by alternating yard time and keeping in separate rooms. New elephants brought into the program must have a stipulation that they will stay only if there is no compatibility problem which may endanger one of the animals.

Records of aggressive behavior in general are kept in the Daily Log. Aggression during training sessions are documented and highlighted in the Training Log. Copies of these reports are kept in the Elephant Barn for reference.

Translocation of Elephants

Bringing new elephants into and shipping elephants out of the facility is necessary to maintain a program over the years. The RD is positioned in the entry to the tunnel at the rear loading area to facilitate these transfers. Animals can be moved safely into position in front of the RD in their crates and the RD Lift Gate used to shift them to the RD where any shipping restraints can be removed. For moving animals out of the facility, they can have any shipping restraints applied at the PC Wall and/or RD and be shifted from the RD to the Crate through the Lift Gate. This has been done with the bull "Tusko" at the start and end of his breeding loan. Video and records of the training can be used to develop a custom program to train other elephants for these procedures.

Enrichment

Elephants are highly intelligent animals that benefit greatly from the mental and physical stimulation that enrichment can provide. Enrichment will be provided throughout the day, but times will vary to reduce anticipation and the stereotypic behaviors that anticipation can trigger. Approved enrichment items are listed in the appendix and can be used freely. Keepers are encouraged to be creative and investigate additional options. New enrichment must be approved by the Elephant Manager and Veterinarian before being used. Browse items must be identified, and if not on the approved list, they must be

cleared through the Zoo's Plant Toxicity reference material. Non food enrichment is particularly important since it lasts longer and does not affect efforts to maintain healthy weight. The yard contains several built-in toys which should be altered regularly to increase interest. Each elephant responds to different items in their own way so variety is important to keep them both engaged. Care must be taken not to provide enrichment in response to any boredom activity. This can reinforce the inappropriate activity and make it very difficult to reduce. Anticipating any boredom and providing relief before it is evident will be more effective.

In addition to specific enrichment items, encouraging natural behaviors can be very important. Skin care takes up much of a wild elephant's time and the exhibit has the substrates and surfaces to allow this activity. Baths can provide stimulation not only during the actual session, but for a long time after while the elephants mud, dust, and rub to finish the skin care process. Training sessions also provide valuable mental and physical stimulation.

Daily enrichment is required to be recorded for all animals in the Daily Log.

Emergency Procedures:

Even the safest programs can experience emergency situations. For details on emergencies involving elephant aggression, see the Aggressive Elephants section above. For physical plant emergencies, see below:

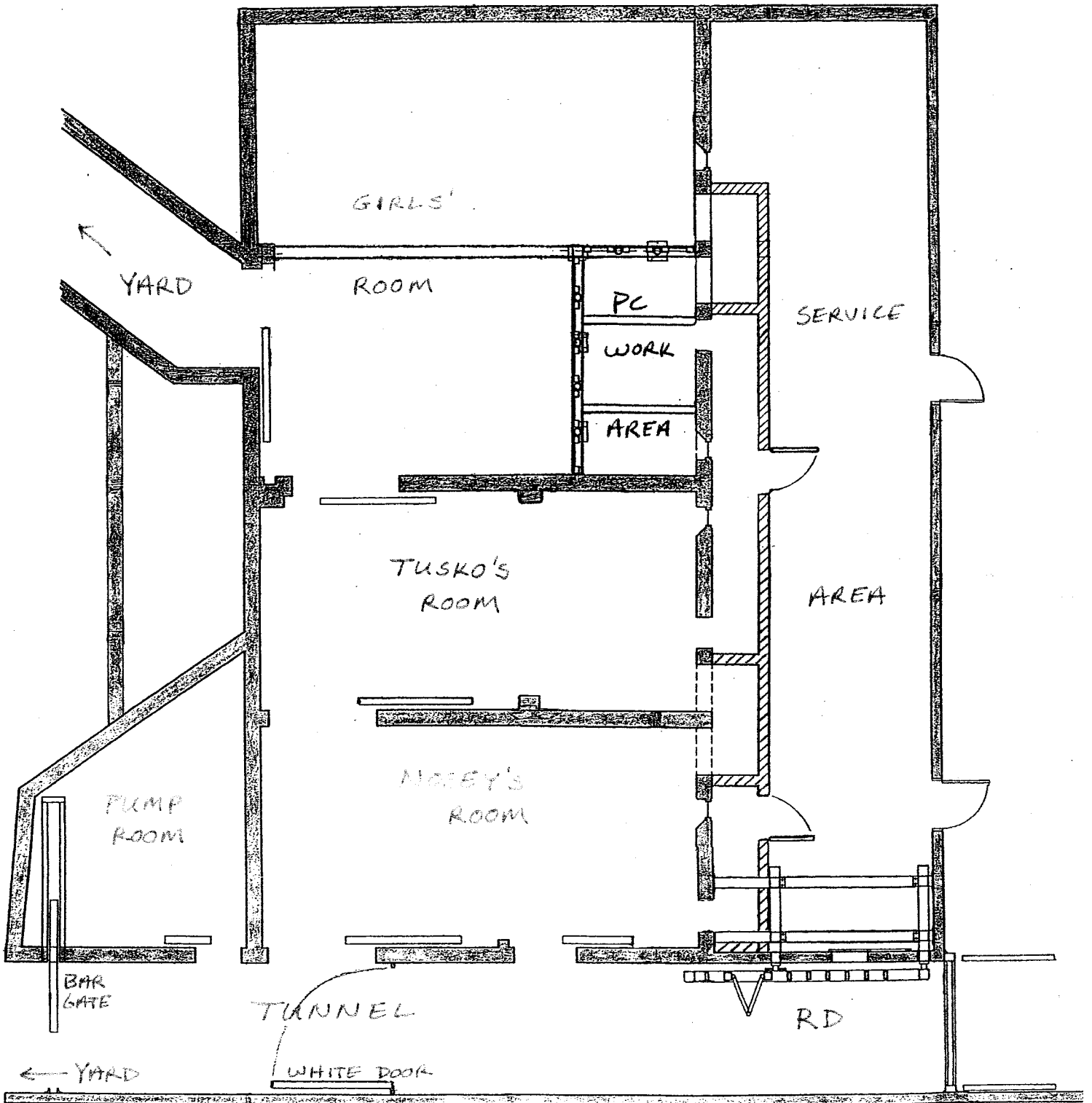
Water shut off: Due to the aging infrastructure in the park, this is a common occurrence. The hot water heater must be turned off (switch is on the lower left side) to avoid overheating as the water drains away. Drinkers should be left full until the water comes back on. If it will be a prolonged outage, the Elephant Barn has access to 3 water supplies. Two feed off of the irrigation system in the park and zoo; usually one of these stays operational. The Tapir Barn is one source and the Tapir exhibit hose is the other. Hoses can be connected to provide service for the Elephant Barn. The Elephant Barn itself operates on the new domestic water supply lines. One of these three sources is almost always active.

Electrical Failure: This is an infrequent but regular problem. Since the hydraulics run on electrical power there is a backup generator behind the barn. Follow the instructions in the Generator Checklist in the appendix for details on operation. The heaters are gas but rely on electric fans to work. If there is no power on a cold night, bring the elephants inside for the night. Body heat in the barn is usually enough to keep them comfortable through one night.

Hydraulic Failure: This has not happened, but the possibility exists. The RD/Bar Gate system is separate from the Barn Door system. If one goes down and repair is too far away, the parts to merge these two systems are in the barn. Call the maintenance dept to organize this transfer and only use it for the bare necessities as the systems are not fully compatible.

Animal Emergencies: Follow the Zoo procedures detailed in the Chaffee Zoo Emergency Protocols in the appendix of this Protocol.

Protected Contact Wall Area



If it will be 40 degrees or above overnight, the elephants get full access to yard and barn:

- ___ Check that Nosey's Door and the door between Nosey's Room and the Bull Room are all the way open.
- ___ Release elephants by having them "Come in Line" while opening the exhibit door, telling them to "Steady, Foot" at the door, and releasing them to the yard with "Alright". Leave their door all the way open.
- ___ Open the door between the Bull Room and the Big Room all the way.
- ___ Put up the yellow hallway chain, and turn off the hydraulic pump. Release the pressure at each of the handles.
- ___ Turn off the lights, and lock all the keeper doors to the elephant rooms.

If it will be between 35 and 40 degrees overnight, the elephants get access to the yard and barn only through Nosey's Room:

- ___ Check that Nosey's Door and the door between Nosey's Room and the Bull Room are all the way open.
- ___ Release elephants by having them "Come in Line" while opening the exhibit door, telling them to "Steady, Foot" at the door, and releasing them to the yard with "Alright". Close the door behind them.
- ___ Open the door between the Bull Room and the Big Room all the way.
- ___ Put up the yellow hallway chain, and turn off the hydraulic pump. Release the pressure at each of the handles.
- ___ Turn off the lights, and lock all the keeper doors to the elephant rooms.

If it will be below 35 degrees overnight, the elephants must stay in the barn.

- ___ Before bringing them inside, put food and enrichment for the night throughout all of the rooms.
- ___ Check that Nosey's Door is closed and the door between Nosey's Room and the Bull Room is all the way open.
- ___ Open the door between the Bull Room and the Big Room all the way.
- ___ Put up the yellow hallway chain, and turn off the hydraulic pump. Release the pressure at each of the handles.
- ___ Turn off the lights, and lock all the keeper doors to the elephant rooms.

APPROVED ENRICHMENT

Species Asian Elephants

7/11/11
D

Food:

1. Bread
2. peanut butter
3. jam
4. oatmeal
5. molasses
6. honey
7. tortilla chips
8. all fruits & veggies (except asparagus)
9. pancakes
10. dandelion
11. seeds
12. croutons
13. nuts
14. pumpkins
- 15.

Non-food Items (inc. spices):

1. ginger
2. vanilla
3. cinnamon
4. peppermint
5. vinegar
- 6.
- 7.
- 8.
- 9.
- 10.

Objects:

1. barrels
2. logs
3. tires
4. chain (attached to stationary item)
5. 'rattles' (made of pipes)
6. boxes
7. fresh dirt
- 8.
- 9.
- 10.

Browse:

1. arundo grass
2. bamboo
3. mulberry
4. alder
5. acacia
6. carrots
7. palm
- 8.
- 9.
- 10.

Misc.

1. mud baths
- 2.
- 3.
- 4.
- 5.