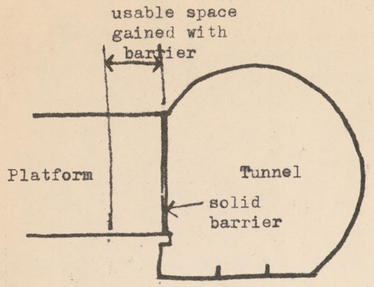
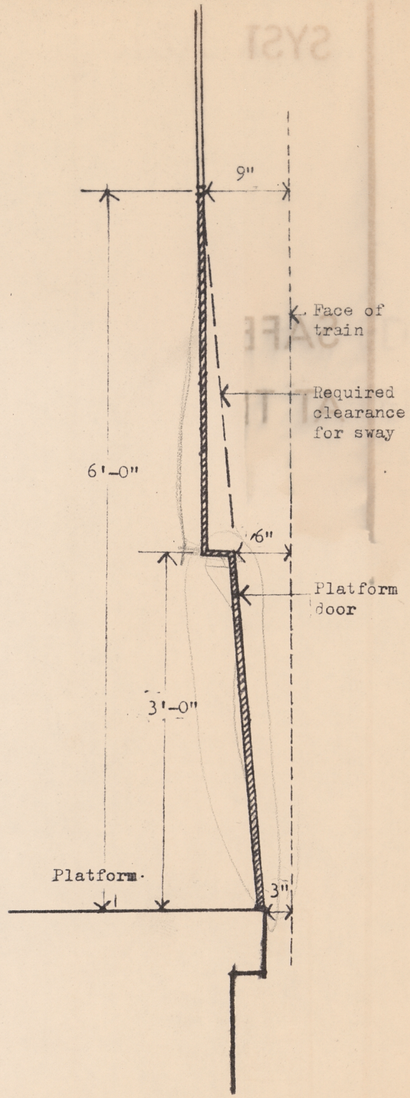
This system deals with the overall height and degree of openness of the barrier wall from the standpoint of the safety of passengers waiting near the platform edge. (1) calls for a barrier which makes it impossible for people to jump or fall in front of an oncoming train: (4) requires that people on the platform neither be able to touch or in any way come into contact with a moving train: (273) requires that an incoming train which is anticipated to be travelling 50 mph when it enters a station, not shock, with sudden sound or air movement, persons standing at the platform edge. (273) is especially critical at rush periods when crowding forces people to stand as close to the edge as they dare. (It is estimated that from 18-25% of the platform width in existing systems is useless because people refuse to get too close to the edge.)



Taken together these three requirements call for a continuous separation, floor to ceiling, the full length of the interface between station and train which will contain the sudden shock of sound and wind on the trackside and keep people completely insolated from the train when it is moving through the station.

(47) keeping people from getting caught in the train door in pressing crowds, is complicated by the existance of the barrier and a second set of doors. (230) which requires that all doors be firmly shut before train leaves station is in the same way complicated by the second set of doorsThe solution to both of these requirements is to have the barrier and train doors immediately next to one another. In this way, anyone caught in one set of doors will always be caught in both sets of doors. The barrier doors should shut ahead of the train doors and in so doing signal to the trainman that the train doors are clear and can be shut. The solution to (47) and (230) as described above is complicated by the clearance requirements for trains in tunnels. At the platforms edge the required clearance is 3"; six feet up from the platform it is 9". The critical zone for catching people's arms, briefcases and legs is from about waist height to the platform. Within this zone the barrier needs to exactly follow the clearance requirement as shown.



SYSTEM 40

SAFETY AT THE BARRIER

PRELIMINARY

BART		
PUBLIC STRUCTURES, INC. WURSTER BERNARDI & EMMONS ARCHITECTS SAN FRANCISCO		
date: 6-23-64	subject: Barrier	
cc:	system no.: 40	drawing no.: 1