

Layout Design Considerations

(Sort of in order of priority....)

Hetch Hetchy Railroad On30

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General

- Model milepost 52 J in 1958. (See the Milepost 52 J Story handout).
- Leave room in the Man Cave for other hobbies.
- Minimize hidden trackage. All track reachable from front of layout.
- Ergonomics: Wide isles, no duckunders, no lift-outs. Ability to move the work table under the layout. All turnouts manual & accessible.
- Dead Rail to avoid most wiring & track cleaning.
- Continuous running option.
- Make upper levels as thin as possible to maximize level differentials.
- One to three person operating crew.

Construction & Maintenance: make it easy

Avoid things that I'm not good at doing, that take a long time, or require physical things I may not be able to do soon (my age....):

- Minimize scenery construction & backdrop painting.
- No electric: switch machines, auto reversing loops, turntables
- Table top benchwork: easy to make track changes, structure locations etc. No helix.

Track Plan: for prototypical operation

- Replicate track plan of the Hetch Hetchy for prototypical operation.
 - Retain the order of stations & branch lines.
 - Replicate track plans at yards.
 - Replicate major changes in elevation.
 - To expand prototypical operation, also model:
 - The SP RR interchange with the Sierra RR at Oakdale.
 - The Sierra RR from Oakdale to Jamestown.
 - The CA Peach Growers interchange with the HHRR.
- But do not attempt to replicate their prototype track plans.

Compromises

- Track Plan and Elevations: space limitations
 - Could do only “similar” track plans at major stations. Locations are very recognizable as the prototype, not exact.
 - No turntable at Groveland (But it was abandoned as undersized anyway!)
 - Loop instead of wye at Mather.
 - No loop at Damsite.
 - Very short incline at Intake.
 - Could not replicate some major elevation changes due to:
 - Short distances between some major points.
 - Need for removable sections in front of windows.
 - Spurs to Moccasin and Buck Meadows had to be relocated.
 - Track behind Moccasin hard to reach. Had to “Bend” Groveland island away from wall for access.

- Wiring, switch machines, and etc.
 - Switch machines were required on:
 - Inaccessible turnouts.
 - Three way turnouts that were hard to visually align.
 - Automatic reversing loops.
 - Switch machines had to be top mounted. Under table machines too hard to install and repair.
 - Photoelectric detectors were required for reversing loops.
 - Peco switch machines needed a pulse booster.

- Construction
 - Needed lift-out sections to remove windows for cleaning. Normally left in place.
 - Needed hinged sections on Sierra RR to bridge isle between Hetch Hetchy Junction and Jamestown.