Agenda - May 11, 2002

Saturday, May 11, 2002

8:30	Executive Session	
9:00	Conventional Facilities Overview	V. Kuchler
9:30	Update on Studies of Ground Motion	A.Seryi / V. Shiltsev
10:00	Site Considerations & UAB Update	C. Corvin
10:30	*Break*	

Conventional Facilities
-
Site Considerations
-
UAB Update

Topics

- NLC CA Virtual Construction Progress
- Rough Site Comparison(s)
- Underground Advisory Board Updates

NLC CA 127 & 135 Construction (virtual)

- Initial Fast Surface Flyovers Completed

- Stop-n-Go Inspection Flights Over-Under-Through the Site(s) will Optimize Alignment & Access where Opportunities are Revealed

- Working in 3D low resolution greyscale
- Dumbed Down to Speed Digital Processing
- Color & High Resolution to be Added Last

Two California Sites

- Site 127

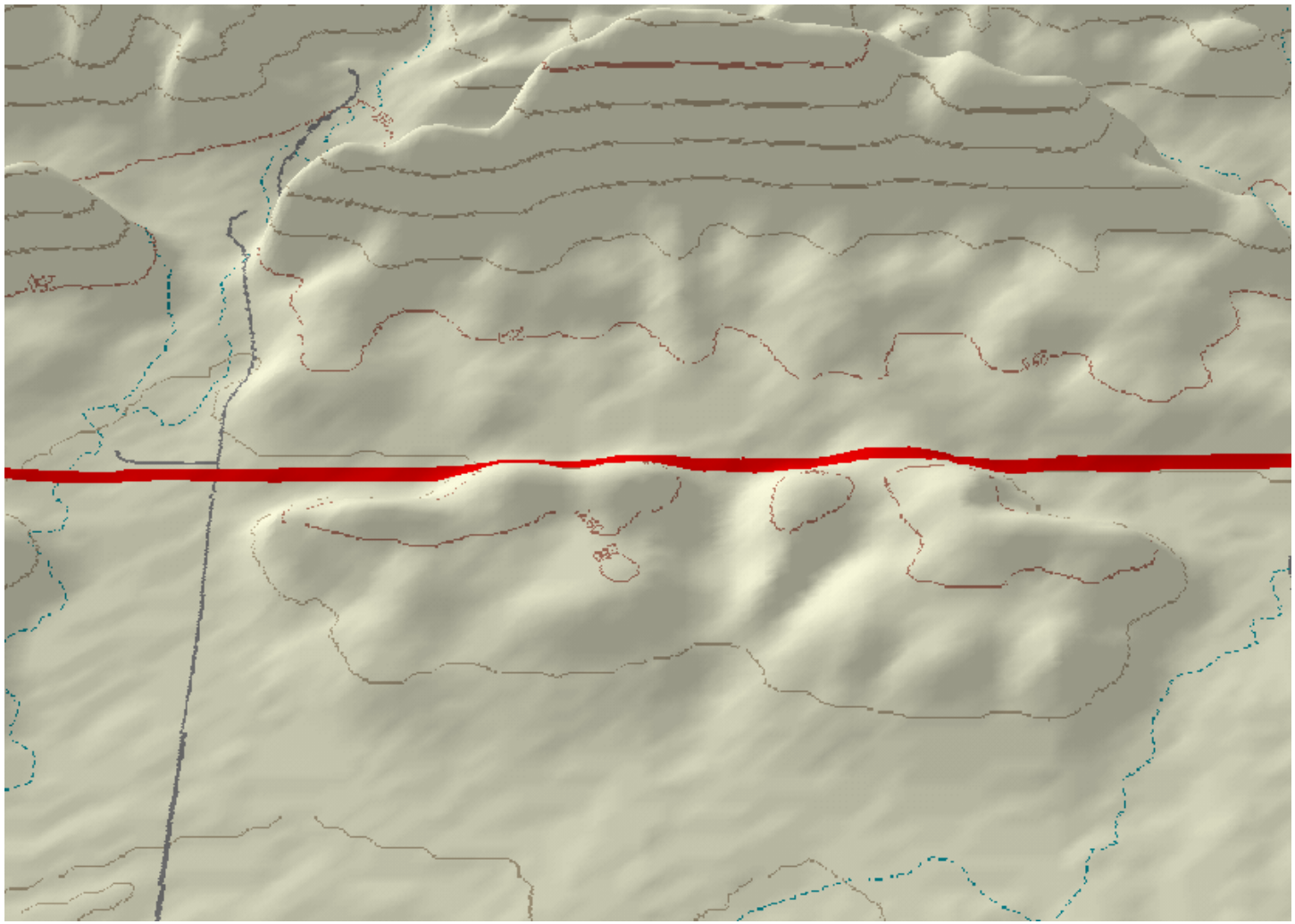
  Bored Tunnel Housing in Sandstone Bedrock

- Site 135

  Cut & Cover Pre-Cast Housing in Sandstone on Bedrock

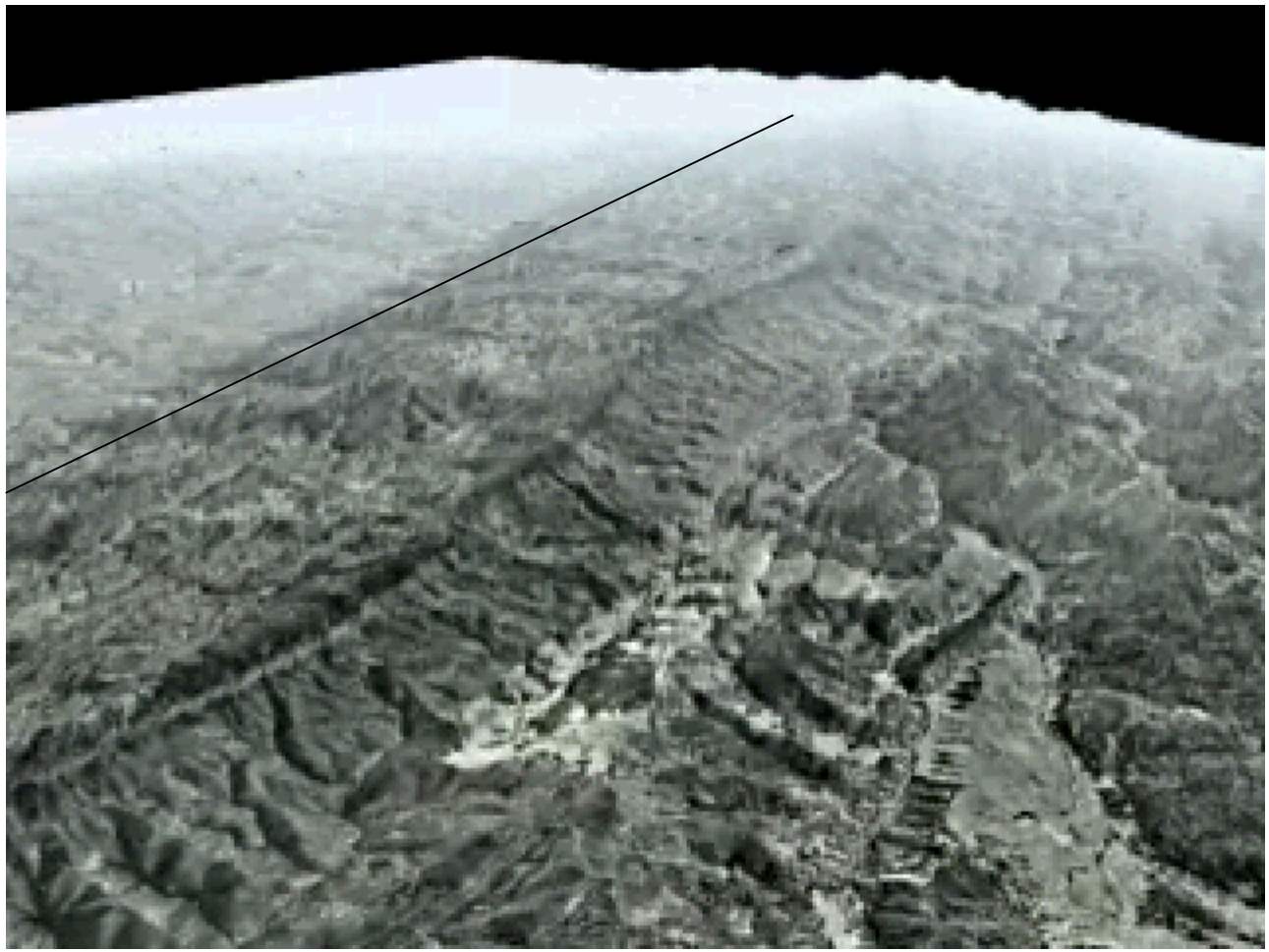
CA 135 Lo-Res Greyscale 3D Hi View - South East

CA Site 135 Sandstone Cut & Cover - 2D Art View West



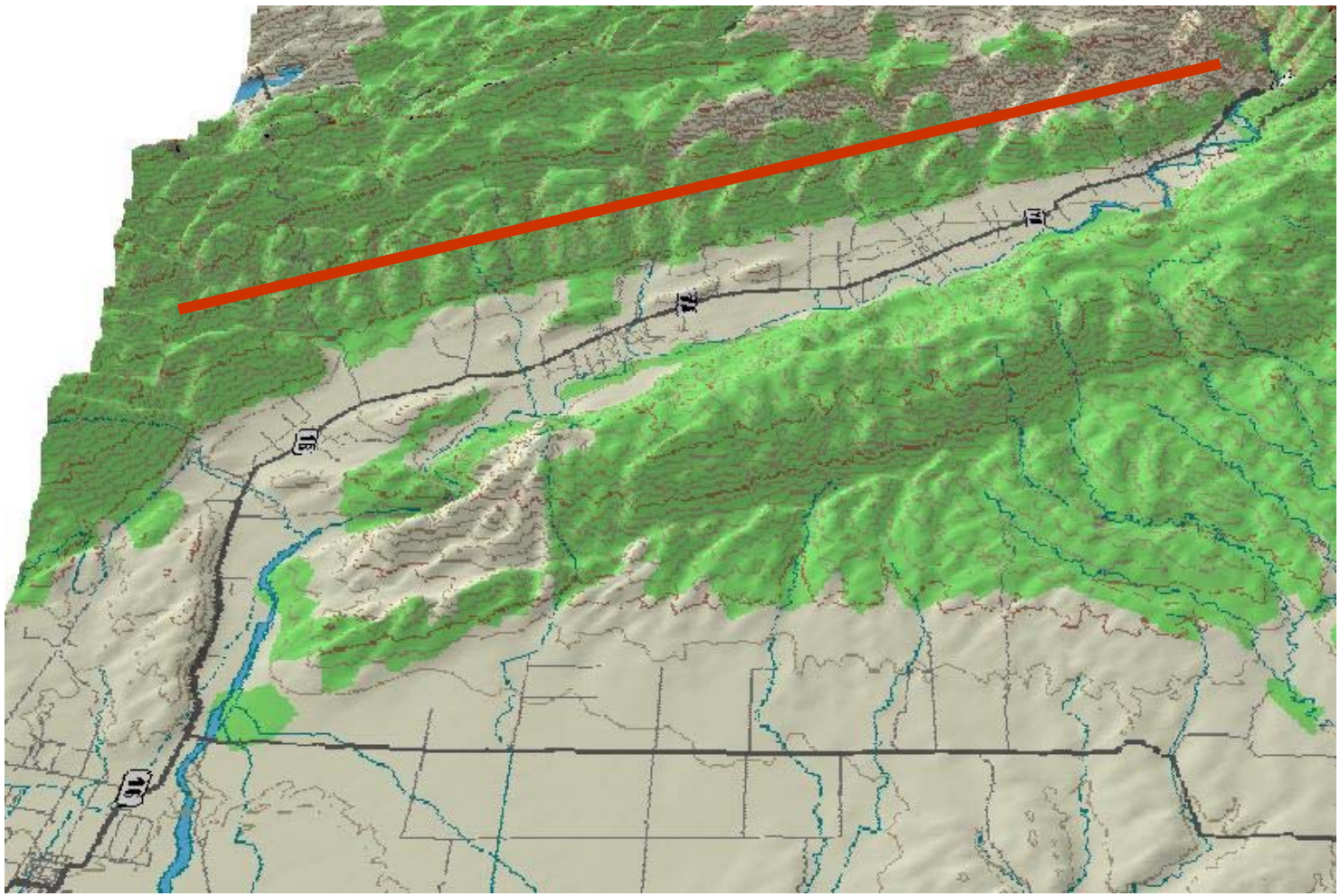
CA 135 Lo-Res Greyscale 3D - Lo View South South East

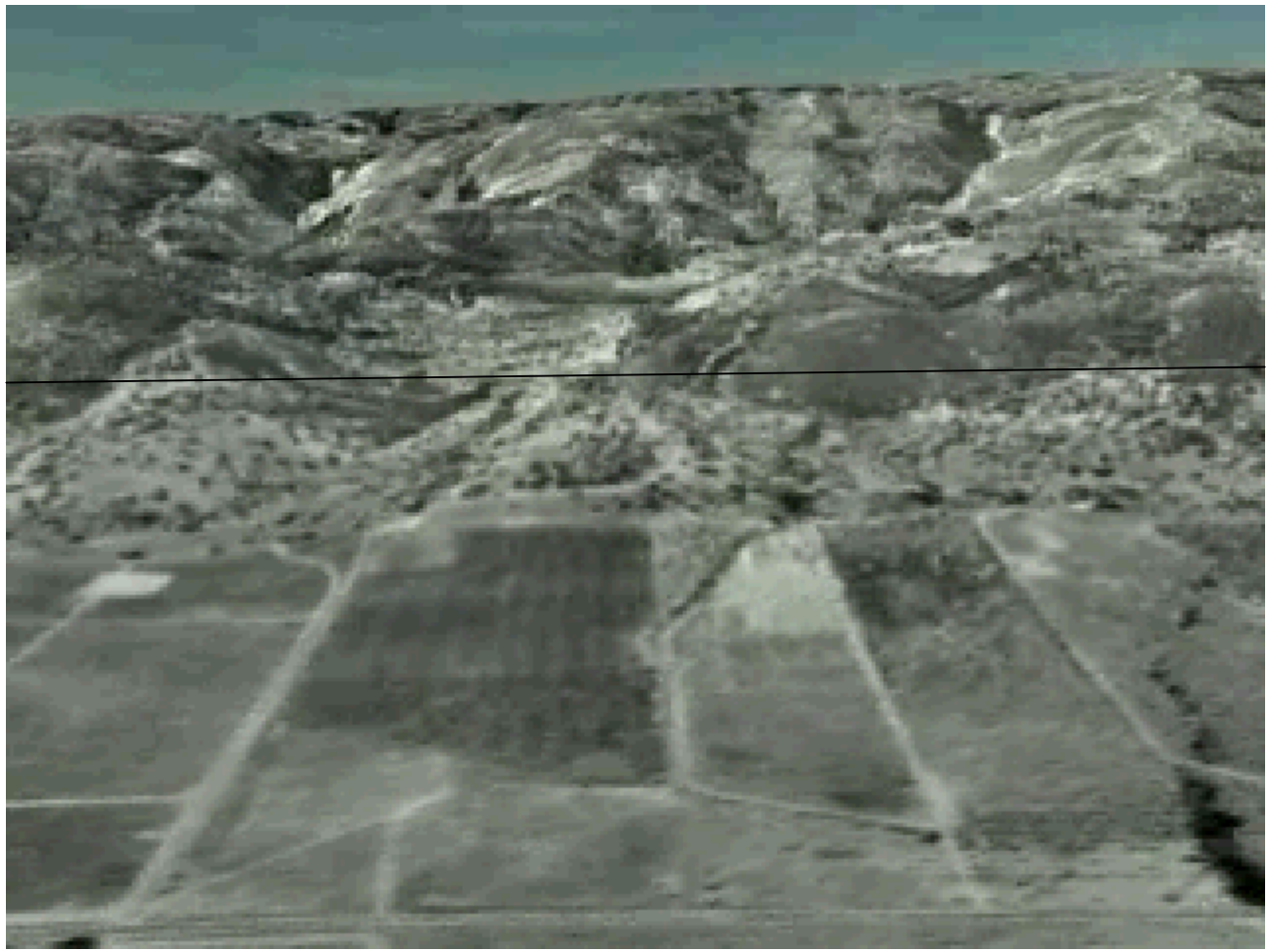
CA 135 Lo-Res Greyscale 3D - Near View South West



CA 127 Digitized Lo-Res Greyscale 3D - Hi View South East

CA Site 127 Sandstone Bored Tunnel – 2D Art View West





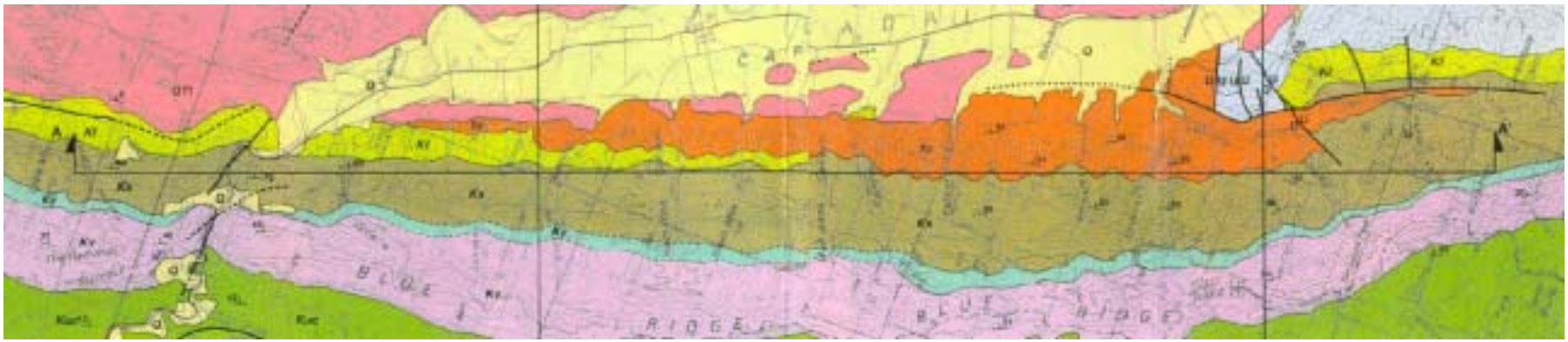
CA 127 Lo-Res Greyscale 3D - Near View West

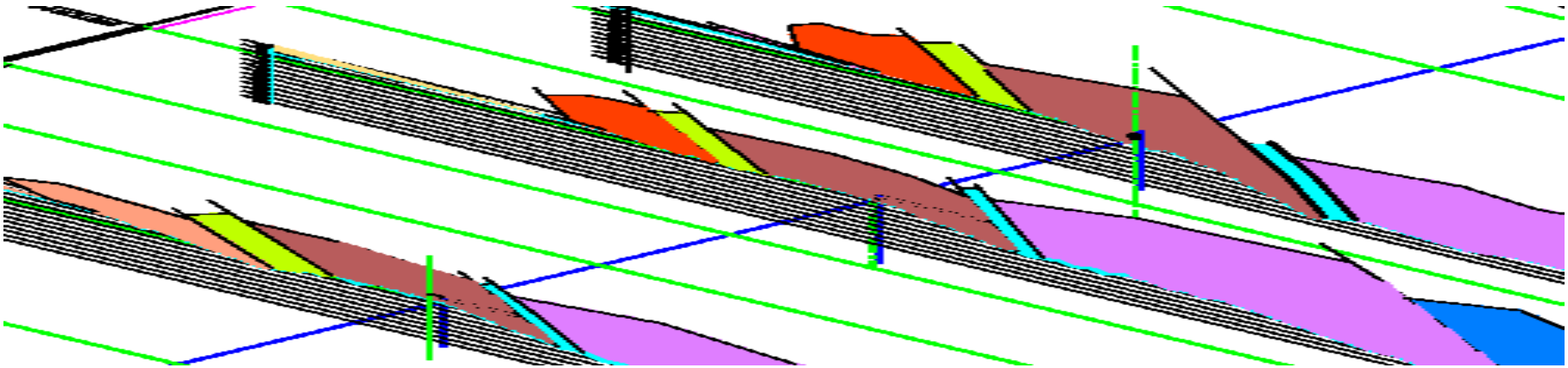
NLC CA 127 & 135 Construction status (virtual)

- Installing Tunnels, Ramps, Housings, etc.
- Actual Geography, Geology, Roads, Buildings
- Real Housing and Access Designs

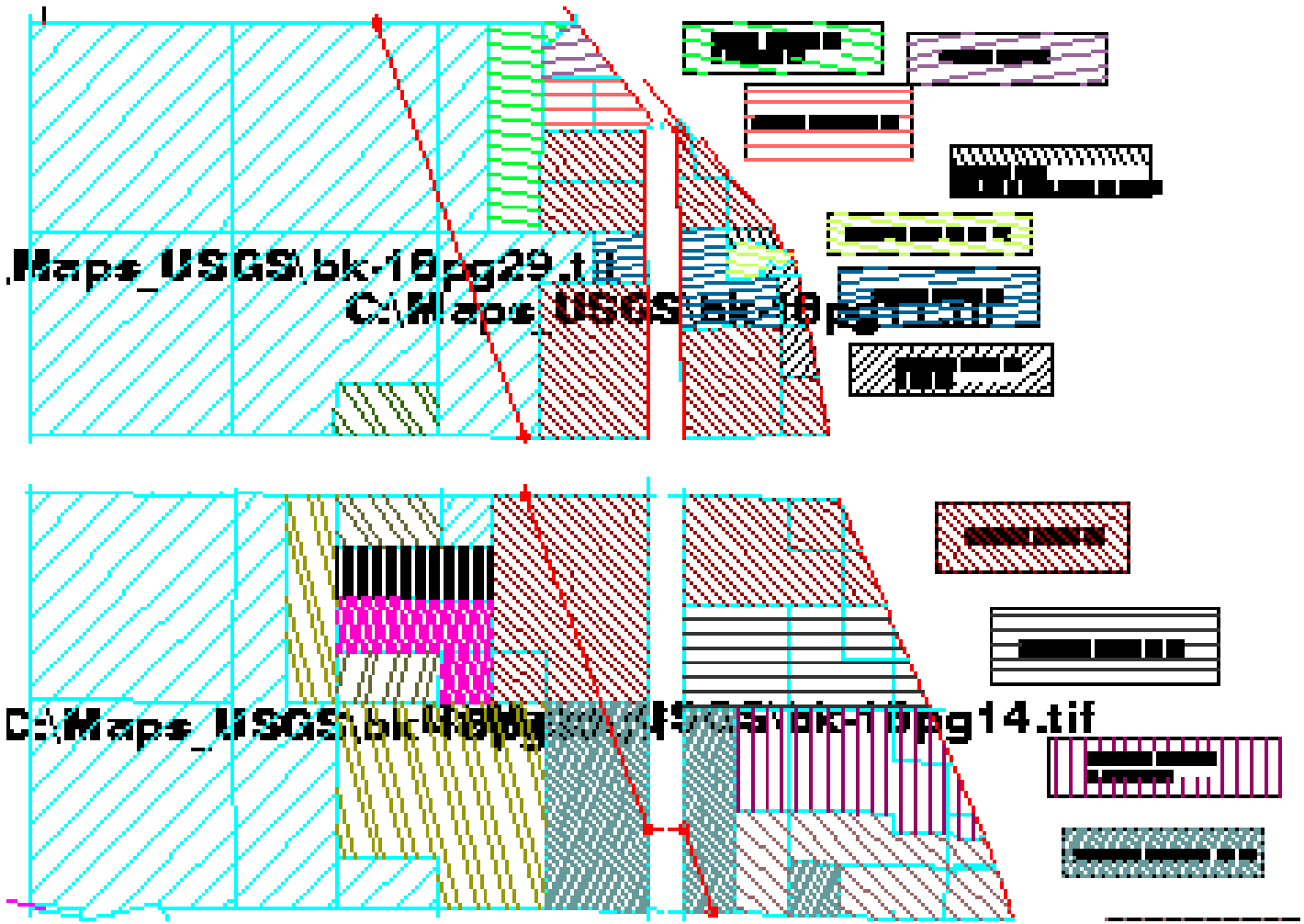
- Select, Position & Optimize Housing Alignment Elevation, and Access
- Drag & Drop Whole Machine

Inserting 3D Geology Into Model from Plans & Sections

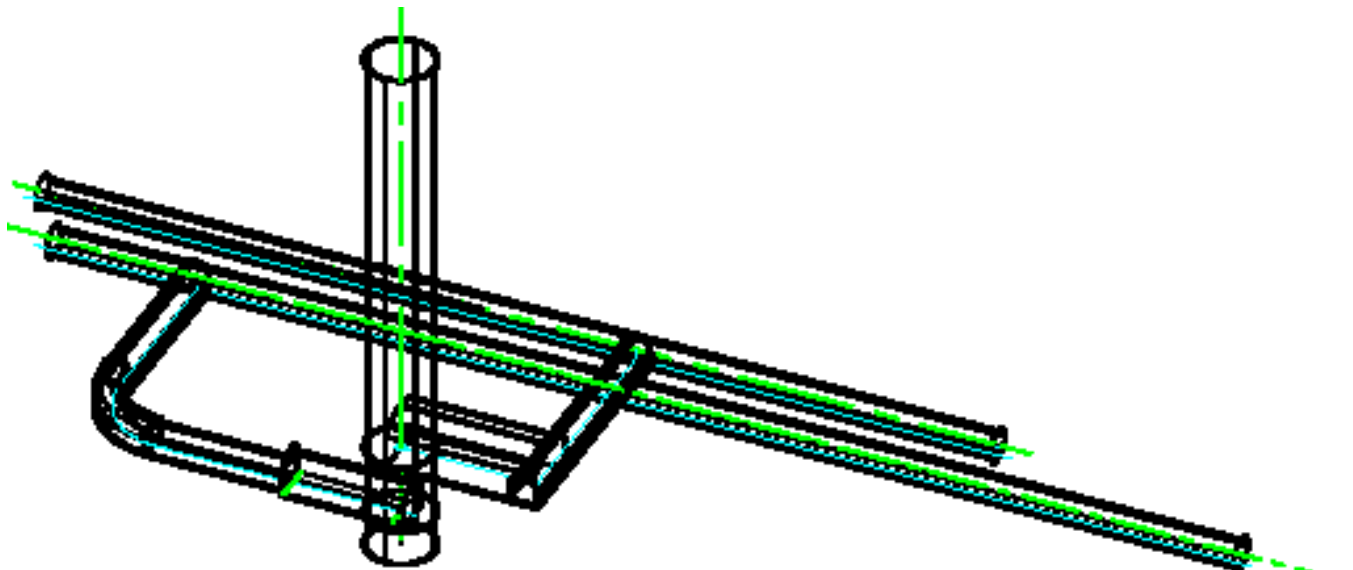




Inserting Public-Private Surface Parcels

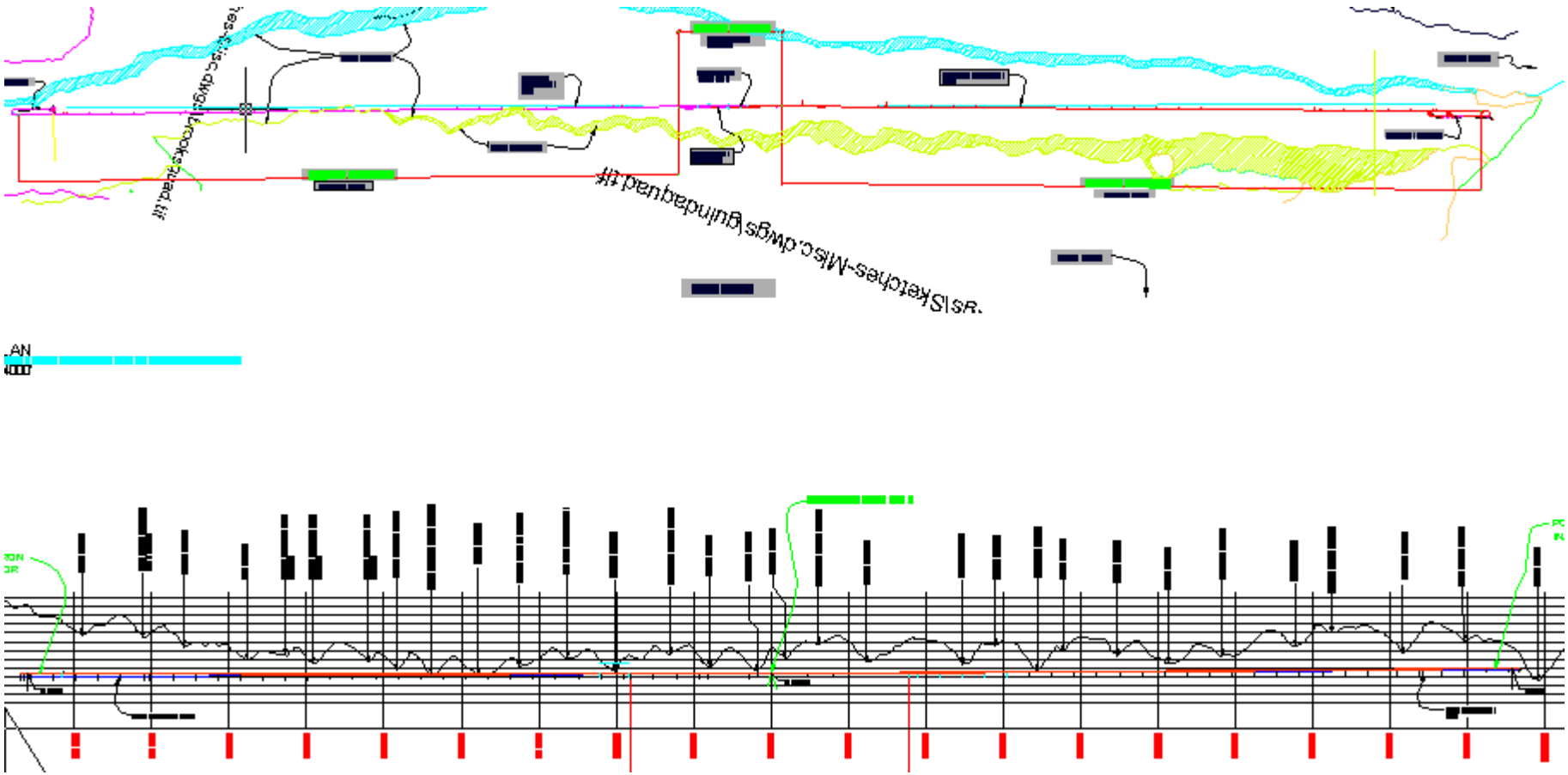


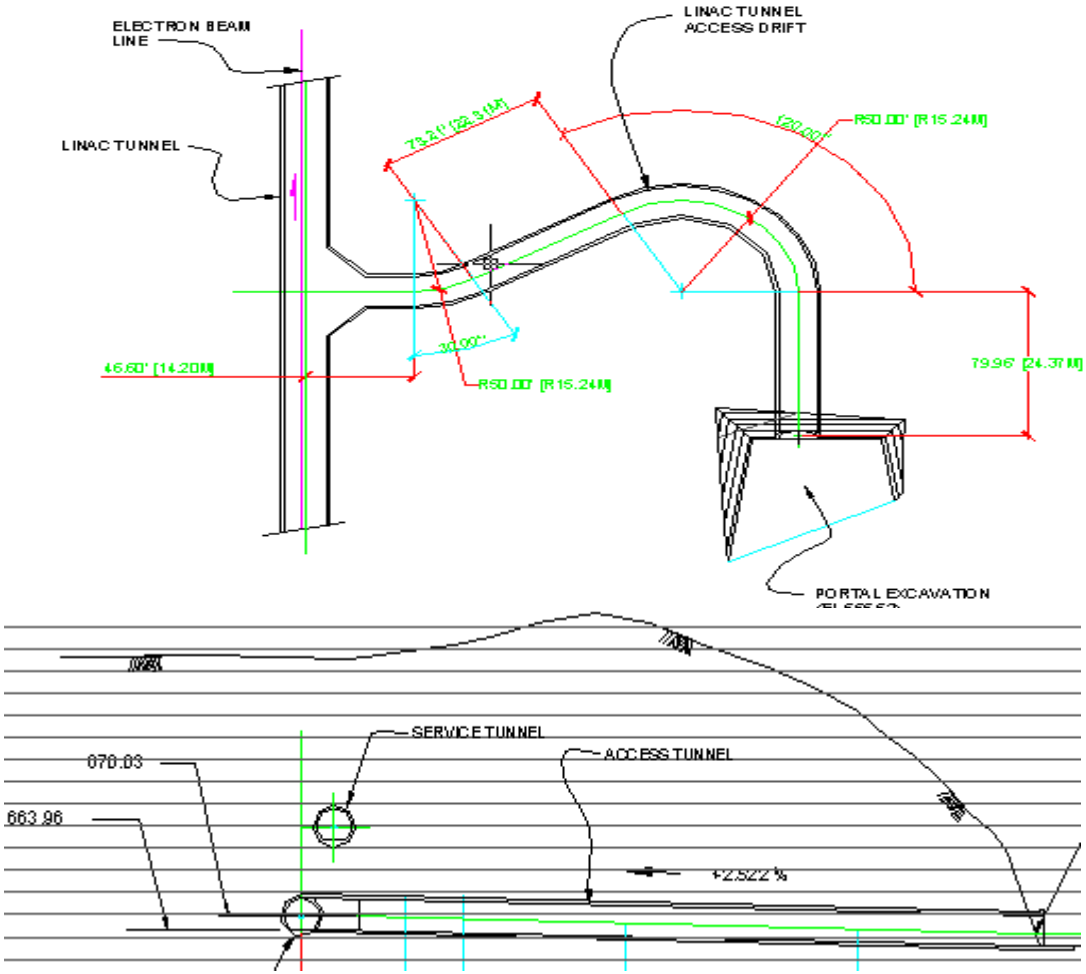
Inserting 3D Structures from First Designs



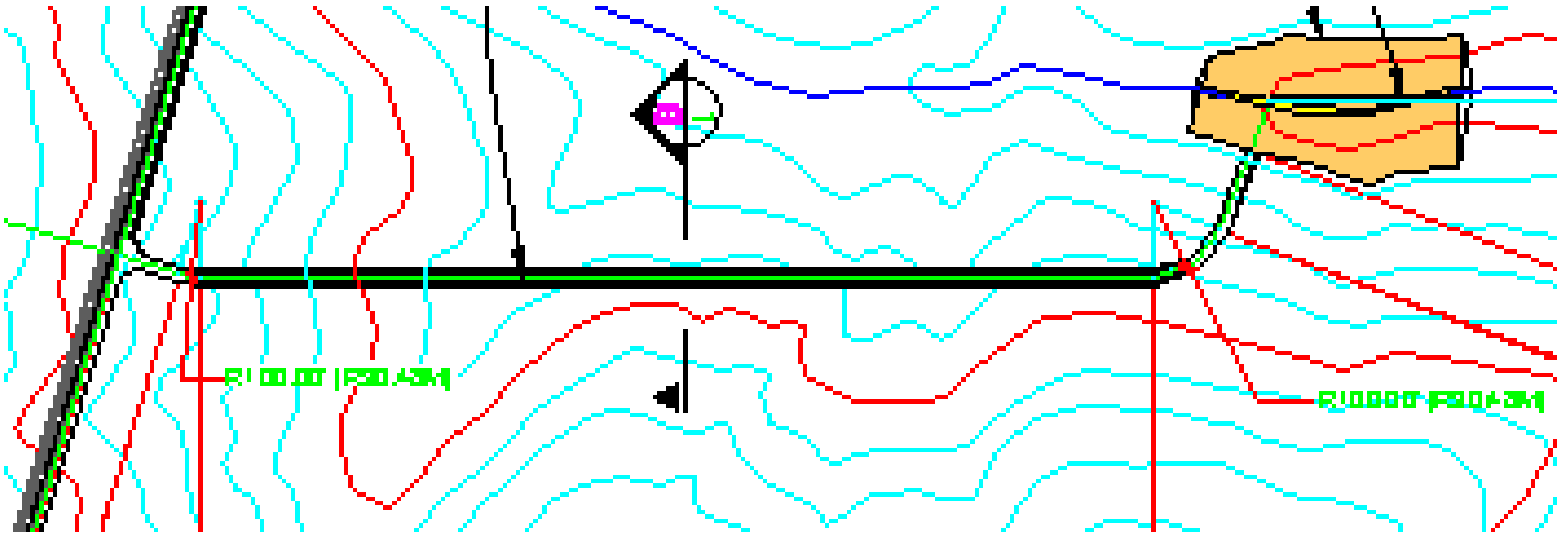
CA 127 Vertical Access to Beam Tunnel & Support Tunnels

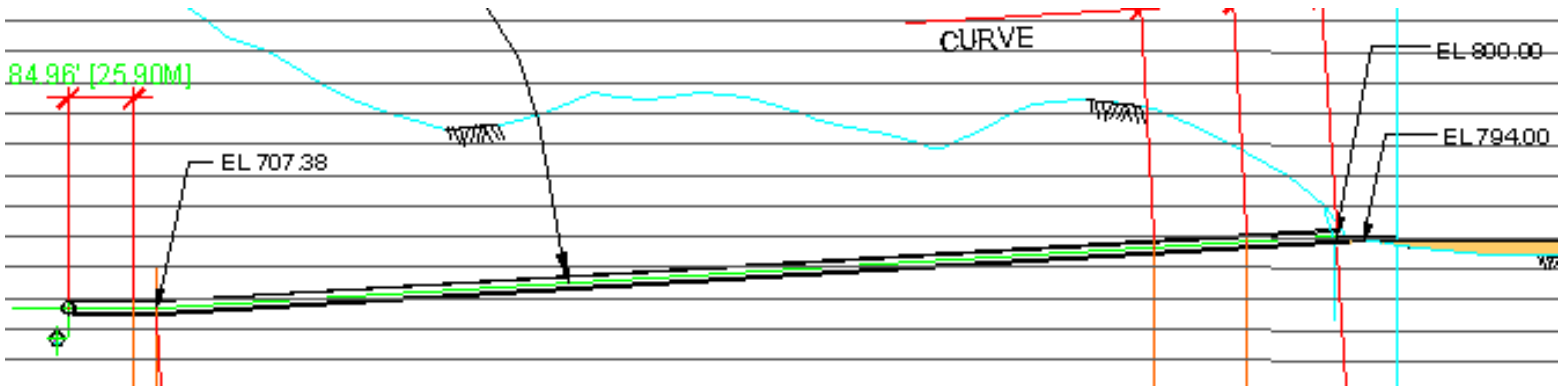
Inserting Plans & Elevations from First Designs



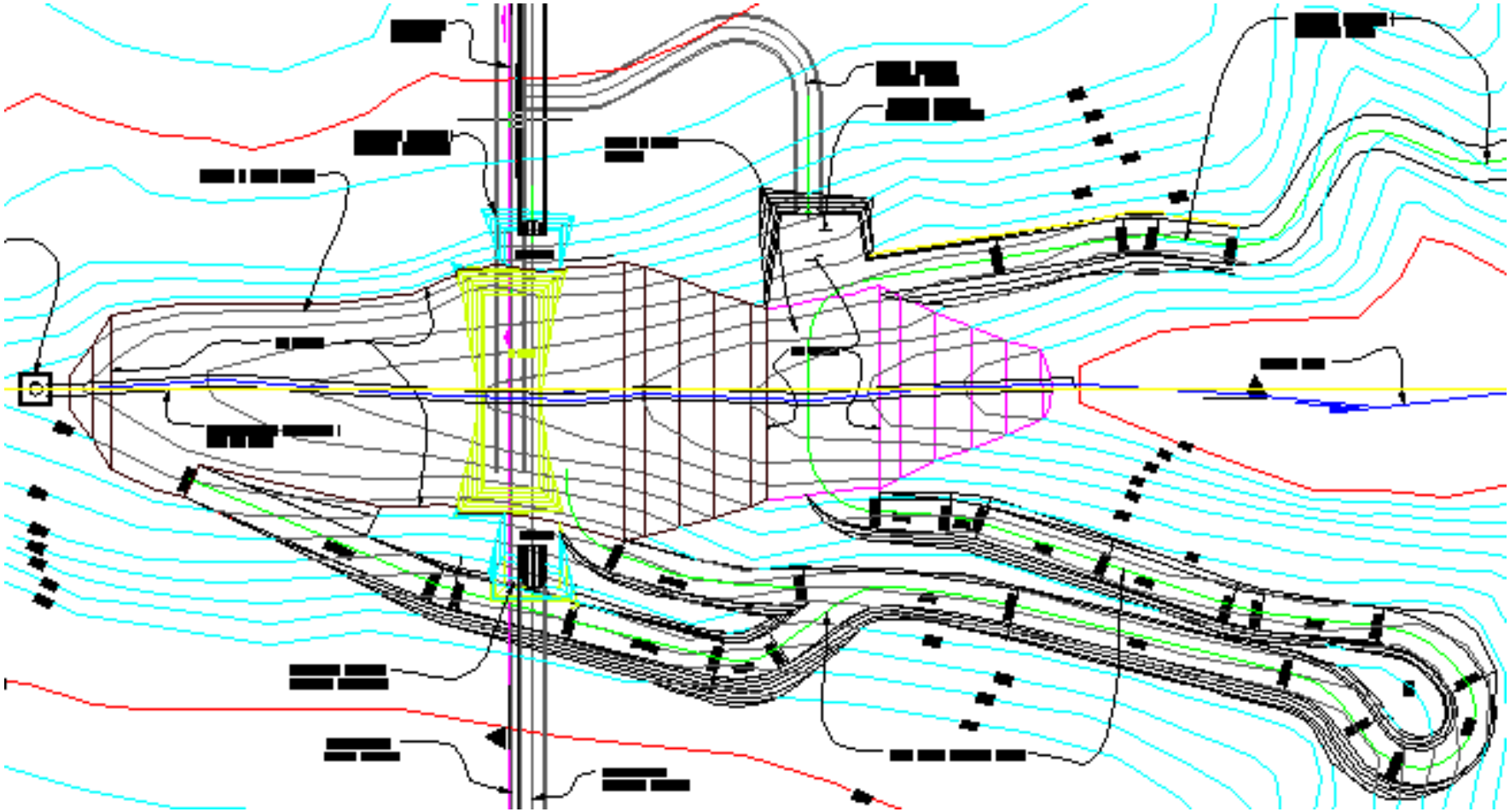


CA 127 Simple Housing Access

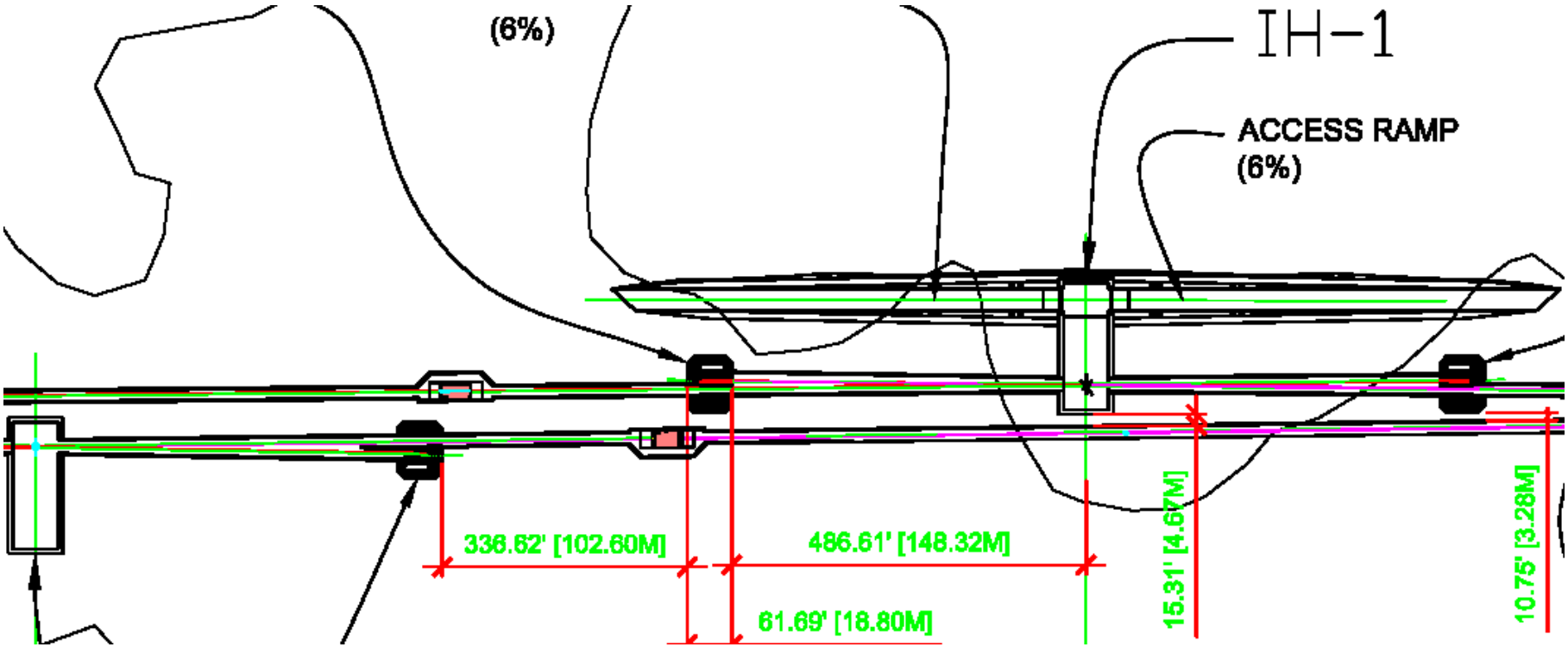




CA 127 Less Direct Housing Access



CA 127 Complex 2X Housing Access



CA 135 C&C Experimental Halls, Access Ramps, Dumps & Muon Spoilers

Topics

- NLC CA Virtual Construction Progress
- Rough Site Comparison(s)
- Underground Advisory Board Updates

Rough Comparison Summary of NLC Sites – 05/11/02

Site	Injectors	Strata	Type	Area	Main Linac Layout
CA 135	Remote	Rock	C&C	Rural	1 X Precast Section + 52 KG
CA 127	Remote	Rock	Bored	Rural	2 X Bored Tunnels
IL N-S LD	Central	Rock	Bored	Suburban	2 X Bored Tunnels
IL N-S D	Remote	Rock	Bored	Suburban	2 X Bored Tunnels
IL E-W	Remote	Glacial Till	C&C	Rural	1 X Precast Section + 52 KG
Tesla	Remote	Wet Gravel	Bored	Urban-Rural	1 X Bored Tunnel + ~7/9 Halls

Topics

- NLC CA Virtual Construction Progress
- Rough Site Comparison(s)
- Underground Advisory Board Updates

NLC UAB IL Meeting Aug. 3, 2001

J. Cogan, J. Simms (facilitators)

T.Burke, P.Garbincius, S.Holmes, V.Kuchler

NLC UAB Consultants:

- Dr. Tom O'rourke – Cornell University
- Dr. Ed Cording – University of Illinois

NLC UAB CA Meeting Aug. 8-10, 2001

J. Cogan (facilitator)

A. Seryi, F. Asiri, J. Sevilla, C. Corvin

NLC UAB Consultants:

- Dr. Tom O'rourke – Cornell University
- Dr. Ed Cording – University of Illinois

NLC Attending Consultant:

- Phil Frame – Registered CA Geologist

NLC IL Project Briefing to the UAB

- NLC Conventional Facilities Overview
- Review of IL FY'00 Solution (N/S)
- Tour of North Aurora Quarry
- Review of NuMI Project
- Ground Motion Issues
- Review of IL FY'01 Solution (E/W)

NLC CA Project Team Briefing to the UAB

- NLC Machine Overview
- CA Geology
- CA Sites
- CA Sites & Construction Techniques
- Beam Stability
- Structural Stability
- Cooling Vibration Stability
- File Cabinet & Kitchen Sink (held back nothing)

UAB First Recommendations

1. Land Research
2. Drilling Samples & Tests
3. Environmental
4. Ground Motion

Progress Made on ALL 4 !

Start "Bottom's Up" Land Research

- Private Lands
- State & Federal Lands

(parcel maps w/alignment(s) completed!)

Obtain California Field Data Now !

(same as Snowmass T6 report)

(all require drilling-testing)

Core & Packer Tests,

Weathering Depths,

Water Sampling, w/Logging

Shale & Claystone Expansiveness

Evaluate Long Term Stability

TBM-Liner Squeezing, Face Raveling

C&C Heave, & More

Drilling Status (halted, March '02)

- Well Data Researched
- Drilling Plans-Specifications Reviewed (twice) & Complete

- Owners Contacted
- Drillers Contacted

UAB First Recommendations

1. Land Research
2. Drilling Samples & Tests
3. Environmental
4. Ground Motion

Progress Made on ALL 4 !

Add

- Environmental Specialist
  (geo-enviro tech hire)
  - Creek Crossings (over & under)
  - Ground Water Management
  - Much Much More

- Tunnel Construction Specialist

Establish & Evaluate Environmental Impact Perimeter Choices

- Have Added Licensed Geo-Enviro Tech to NLC Conventional Facilities Team
- Identify Alignment & Perimeter Choices Framed Against Potential Environmental and Public Impact

Environmental Impact Perimeter

- Draft First Outline Summary of NLC Data prior to Launching an NLC EA/EIS
- Evaluate Adjacent CA EA/EIS Progress CA Dept. of Water & Power Reservoir

- Geophysics
  - Ground Motion Monitoring
    (sites 127,135 data taken)
  - Model for Tunnel Vibration and Supporting Field Work
    (DMJM Proposal Tunnel-Tunnel Vibration)

Conventional Facilities
-
Site Considerations
-
UAB Update
END