



***ILC CFS MECHANICAL &
ELECTRICAL REVIEW***

MECHANICAL INTRODUCTION

***CONVENTIONAL FACILITIES
AND SITING***

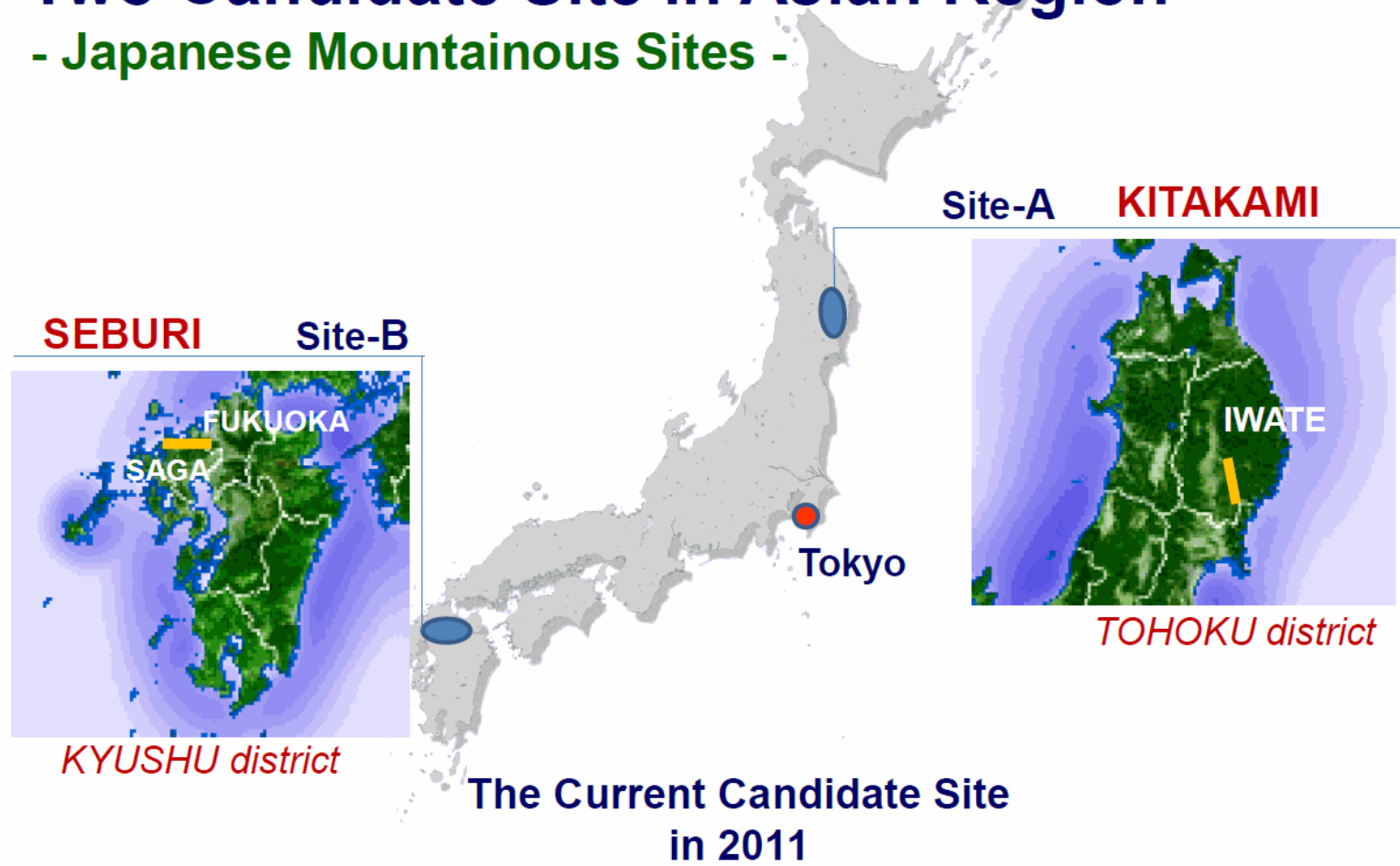
V. Kuchler

Overview

- *For the ILC Technical Design Report, the Asian and Americas Regions will Each Produce a Mechanical and Electrical Design Suited to Specific Local Site Conditions*
- *The Asian Site(s) are in Mountainous Regions with Horizontal Tunnel Access to the Machine Tunnel Layout*
- *The Americas Site has a Relatively Uniform Surface Elevation with Vertical Shaft Access to the Machine Tunnel Layout*
- *In Both Regions, the Designs were Developed by Outside Consultants Supporting the Respective Laboratory CFS Groups Using Criteria for Full Power Operation*
- *This Meeting will Provide an Independent Review of these Regional Mechanical and Electrical Design Efforts*

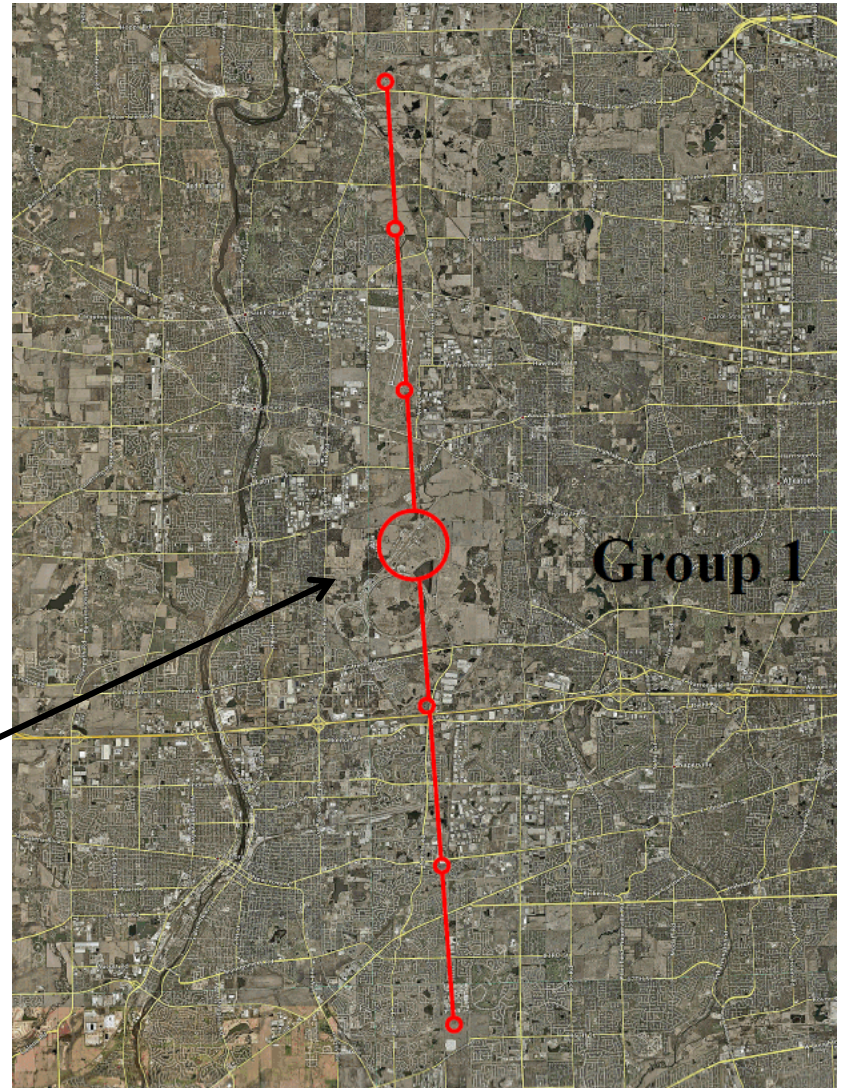
Two Candidate Site in Asian Region

- Japanese Mountainous Sites -



**Americas Region
Sample Site at the
Fermi National Accelerator
Laboratory Located in
North Eastern Illinois**

**Sample Alignment
Centered on the
Existing Fermilab Site**

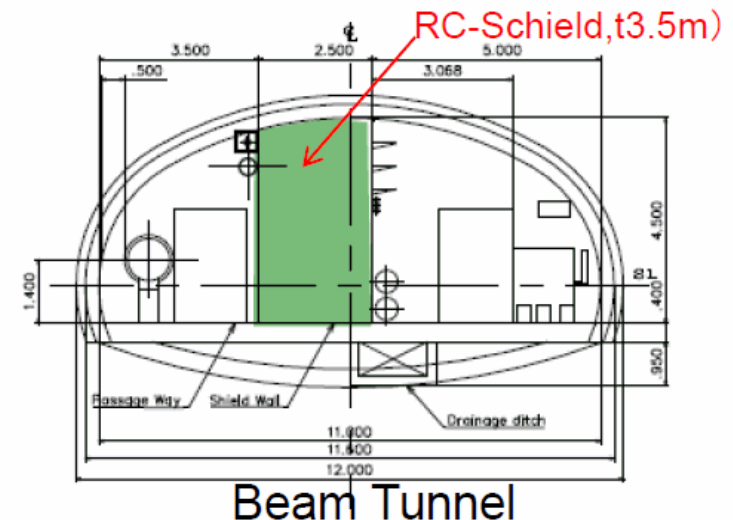


Asian Tunnel Configuration

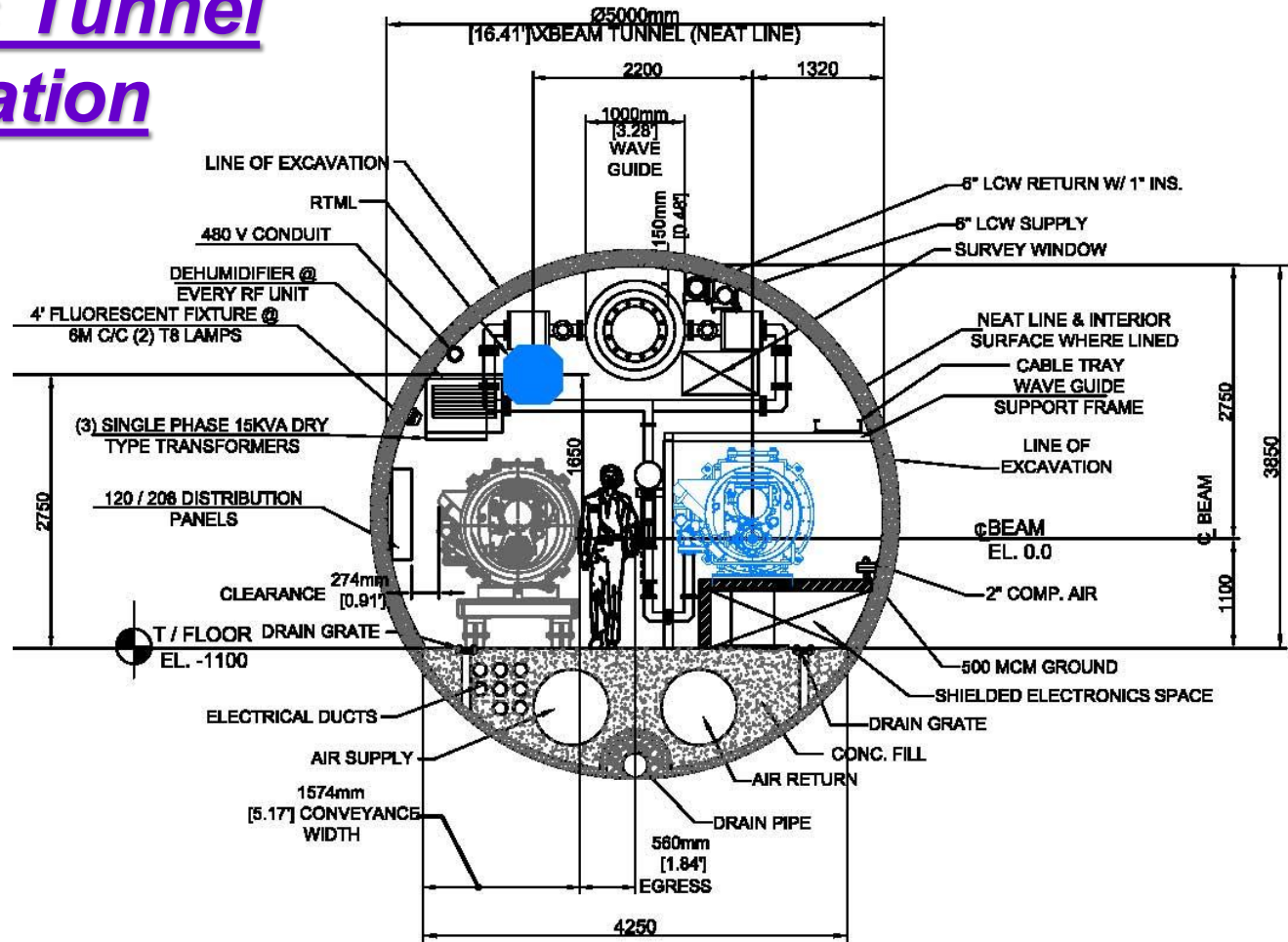
CASE-8 《wS-N-D》 - Single Tunnel - NATM - DRFS System

■ Improved Version of Case-7

- RC-Shield Wall of 3.5 m thickness Protects the Person in the RF Zone from Radiation.
- It is not Necessary to Arrange the Local Cavern (Machine Room) for Air-Conditioning and Cooling Water Supply.
- Refuge Path



Americas Tunnel Configuration





Meeting Format

- *CFS Would Like to Thank the Panel Members for Their Participation in this Important Review*
- *CFS Would also Like to Thank the Representatives of the Consulting Firms who are in Attendance from Nikken-Sekkei, JPower, and Parsons*
- *The Morning Session will be Devoted to the Asian and Americas Region Mechanical Design*
- *The Afternoon Session will be Devoted to the Asian and Americas Region Electrical Design*
- *Ample Time has been Allotted Following Each Presentation for Questions and Open Discussion Between the Panel, Presenters and Representative of the Consulting Firms*
- *A Short Close-out Session is Scheduled at the End of the Day for Comments by Panel Members*