



HI-STORE

Chapter 2 & Environmental Report RSIs

• Purpose and Discussion

- This presentation outlines the methodologies that will be utilized to respond to Chapter 2 RSIs 2-1 through 2-11 and Environmental Report RSIs ER-1 through ER-9.
- The information requested will be used to determine compliance with the applicable sections of 10CFR72, NUREG-1567, and Regulatory Guide 3.48.
- Specific focus on RSIs 2-9, 2-10, 2-11

- **RSI 2-1**

- Requested information includes:
 - Entire GNEP Siting Study
- Strategies to respond
 - Holtec will provide entire GNEP Siting Study

- **RSI 2-2**

- Requested information includes:
 - Discussion on mining processes at Belco and Intrepid facilities.
 - Potential effects on Holtec CISF
- Strategies to respond
 - Additional details, history, tables, and figures will be included in the chapter to discuss the mines and their potential impacts.

- **RSI 2-3**

- Requested information includes:
 - Provide assessment of the hazards from aircraft, flight related activities to proposed CISF.
- Strategies to respond
 - Additional aircraft flight patterns and data
 - Research from FAA master records and Military Training Routes (MTRs) will be included.
 - Hazards assessment will be performed using this data

- **RSI 2-4**

- Requested information includes:
 - Provide assessment of the hazards from cargo transported through roads and railroads near proposed CISF.
- Strategies to respond
 - Additional freight patterns and data pulled from:
 - National Hazardous Materials Route Registry (NHMRR)
 - United States Department of Transportation (USDOT)
 - New Mexico Department of Transportation (NMDOT)

- **RSI 2-5**

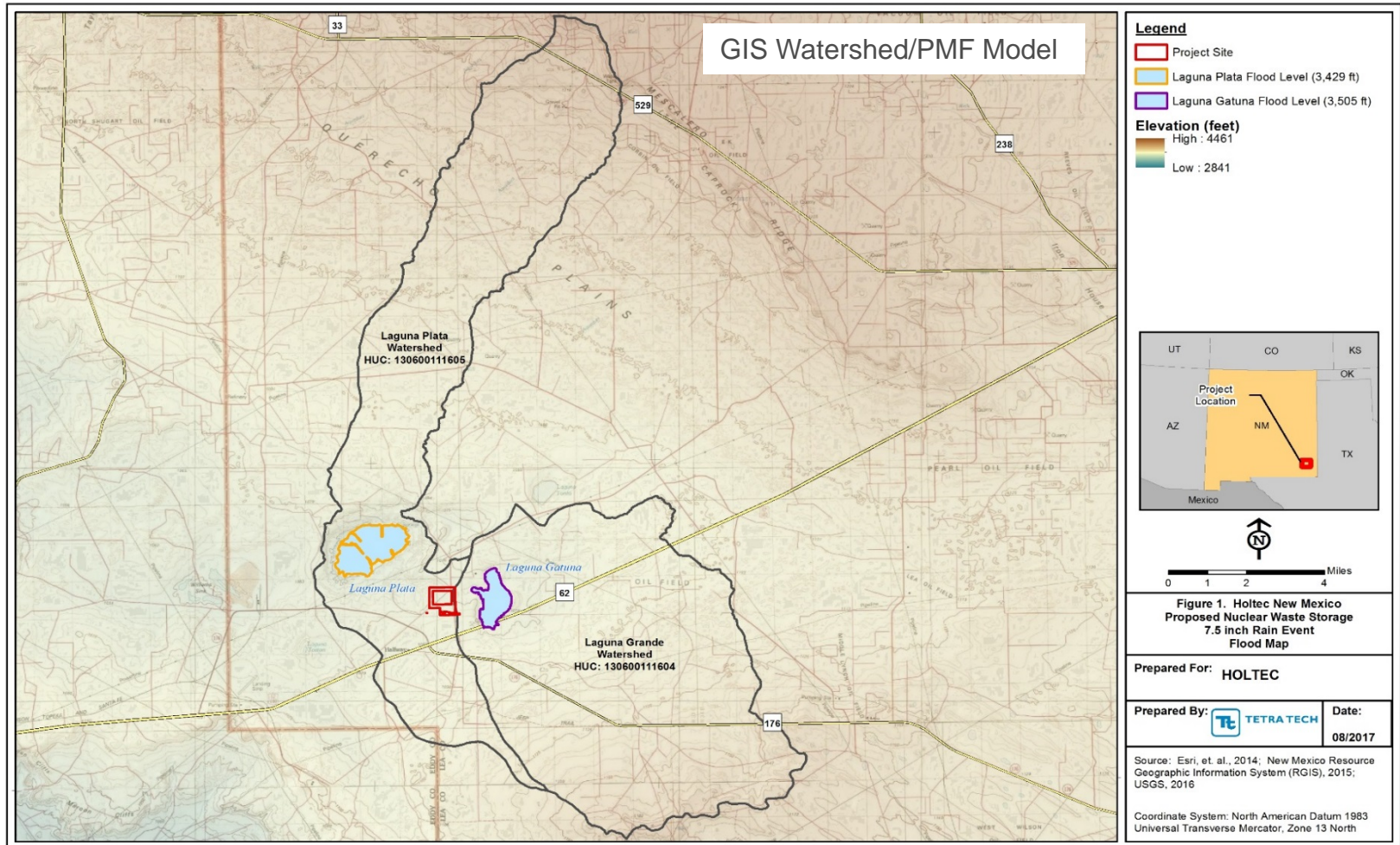
- Requested information includes:
 - Information describing hydrologic characteristics of the site.
- Strategies to respond
 - Additional data compiled from:
 - Federal Emergency Management Center Flood Map Service Center
 - State of New Mexico Interstate Stream Commission, Lea County Regional Water Plan 2016
 - U.S. Fish and Wildlife Service, National Wetlands Inventory
 - Western Regional Climate Center, Hobbs, Lea County Airport Data
 - Etc.

- **RSI 2-6**

- Requested information includes:
 - Elevation of SSCs with respect to site Probable Maximum Flood (PMF)
- Strategies to respond
 - Additional discussion on topography, site elevations, SSC elevation, and expected flood levels.

- **RSIs 2-7 and 2-8**

- Requested information includes:
 - Probable Maximum Flood
 - Site specific topography
 - Site specific hydrologic information
 - Laguna free board space
- Strategies to respond
 - Analysis using GIS data to determine PMF Level.
 - Digital elevation model
 - 24-hour storm data



- **RSI ER-1**

- Requested information includes:
 - Schedule of construction phases
- Strategies to respond
 - Construction Phases and Timelines to be detailed
 - Construction impact per phase to be considered

- **RSI ER-2**

- Requested information includes:
 - Publicly available replacement pages
- Strategies to respond
 - Review and revise any sensitive figures

- **RSI ER-3**

- Requested information includes:
 - Proposed site and impact of new access road and railroad spur
- Strategies to respond
 - Map of site, access road, and railroad spur
 - Describe expected impacts

- **RSIs ER-4 & 5**

- Requested information includes:
 - Wind roses and dispersion characteristics
- Strategies to respond
 - Provide evaluation of wind characteristics
 - Wind roses
 - Dispersion characteristics and mixing heights
 - Data from:
 - Midwestern Regional Climate Center Hobbs, Lea County Airport Data
 - University of Toledo Atmospheric Stability Classification

- **RSIs ER-6 through ER-9**

- Requested information includes:
 - Additional information pertaining to ecological studies, construction waste sources and quantities, and alternative siting locations.
- Strategies to respond
 - Further discussion and clarification of relevant subjects in their respective Environmental Report Chapters
 - Ecological study covers entire disturbed area, all phases
 - Construction timeline (ER-1) to present waste generation timeline
 - Clarification of alternative siting considerations

- **RSIs 2-9 & 2-10**

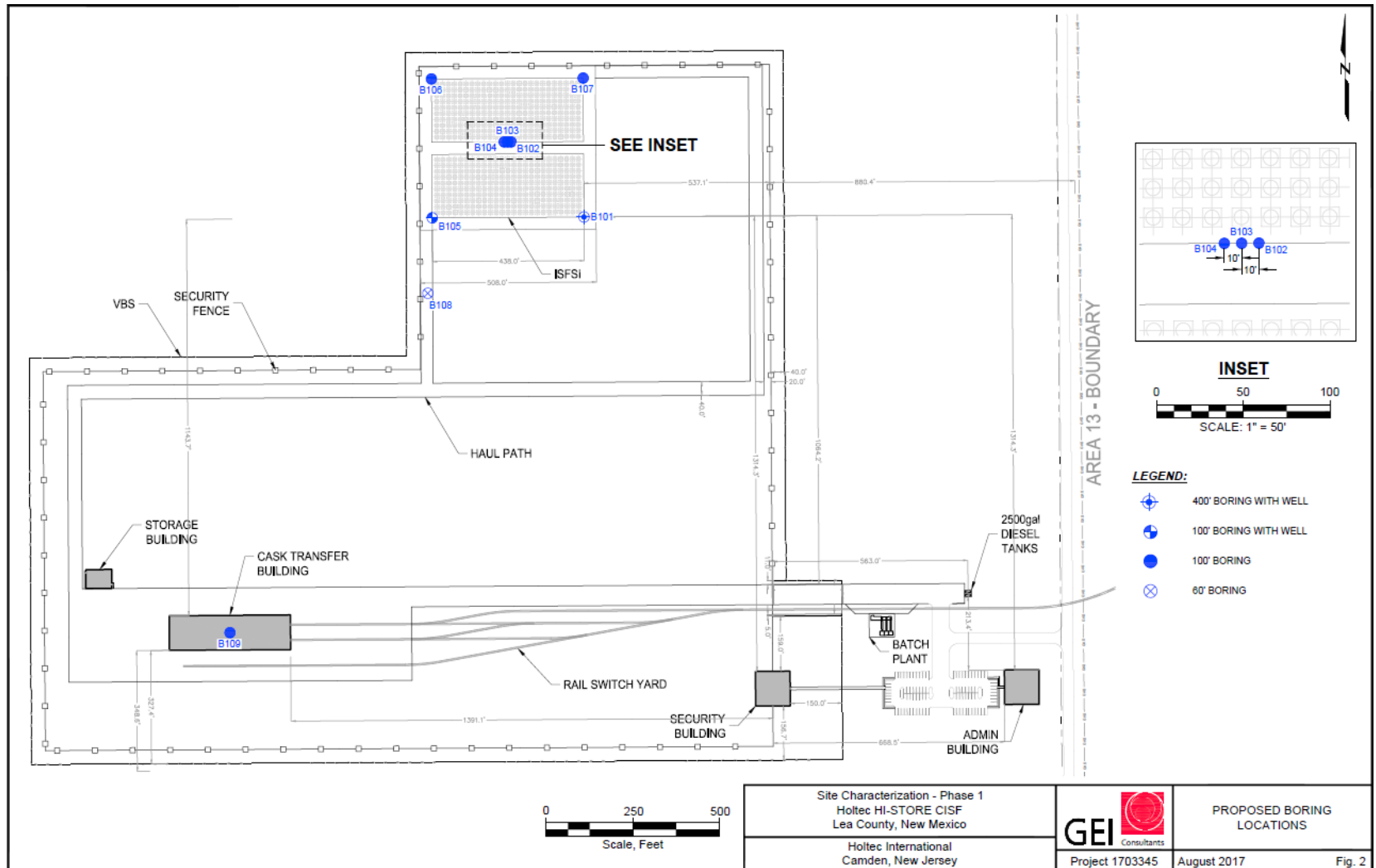
- Requested information includes:
 - Detailed characterization of site subsurface material
 - map of geotechnical exploration
 - Geological profiles
 - Groundwater mapping

- **RSIs 2-9 & 2-10 (cont.)**

- Strategies to respond
 - Boring plan generated using standard Holtec protocol
 - Protocol has been used at many other ISFSI sites (SONGS, BFN, CPS, WBN, Etc.)
 - 9 Standard Penetration Test (SPT) Borings
 - Cross-Hole Seismic Test
 - NUREG-1567 required laboratory testing
 - Groundwater observation wells
 - NUREG-0800 Section 3.2.7 COV values taken as 1

HI-STORE Chap. 2 RSIs

a generation ahead by design®



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Lab Test Type	Standard
Moisture Content	ASTM D 2216
Sieve Analysis	ASTM D 422
Atterberg Limits	ASTM D 4318
Thin-Walled Shelby Tube Sampling	ASTM D 1587
Unconfined Compressive Strength of Cohesive Soil	ASTM D 2166
California Bearing Ratio	ASTM D 1883
Rock Compressive Strength and Moduli Test	ASTM D 7012
1-D Consolidation Test	ASTM D 2435
Consolidated-Undrained Tri-axial Testing	ASTM D 4767
Density (Unit Weight)	ASTM D 7263
Specific Gravity	ASTM D 854
Compaction Character (Modified proctor)	ASTM D1557
Consolidated Drained Strength	Bishop&Henkel
Petrographic Analysis	Best Industry Practice
Cyclic Triaxial Test	ASTM D3999

- **RSI 2-11**

- Requested information includes:
 - Liquefaction potential
 - Bearing Capacity
 - Settlement
 - Seismic pressures for below grade structures
 - Sliding Assessment
- Strategies to respond
 - Soil borings and laboratory testing to determine in-situ soil properties
 - Modeling and Analyses using the inputs gathered from investigations

QUESTIONS?