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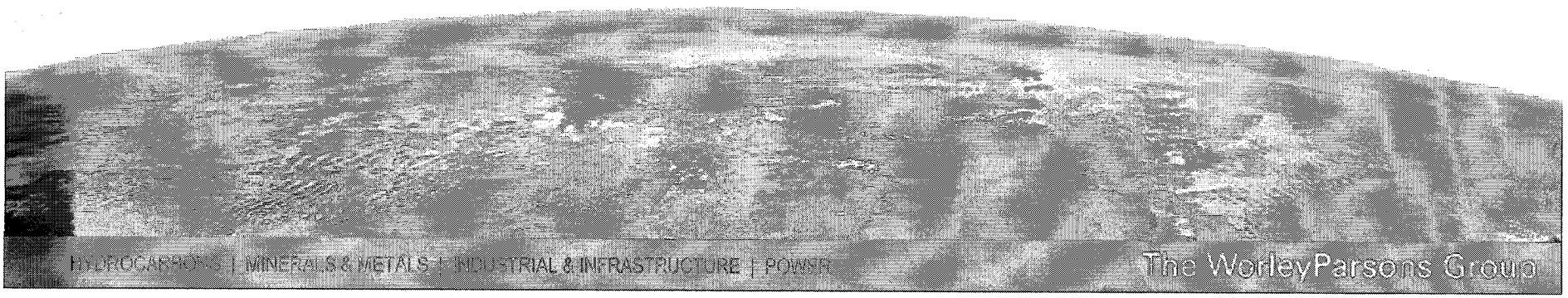
TVA KINGSTON FOSSIL PLANT GYPSUM DISPOSAL PRELIMINARY DESIGN

4-Oct-05



Permitting Strategy

- Phase 1 – Gypsum Pond
  - Construct limited footprint to provide bypass capability and temporary gypsum storage in the event that marketing is no longer feasible. Can provide for up to 2 years of full gypsum production (approximately 30 foot depth required for 2.5# coal).
- Phase 2 – Gypsum Rim Ditch Stack
  - Will be implemented if long-term disposal on-site is required.
- Transition Between Phase 1 and 2 if Phase 1 Requires Expansion
- Permitting strategy is to permit the full footprint, construct Phase 1 only, followed by Phase 2 if needed, or construct both (maximum flexibility).

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Flow Diagram

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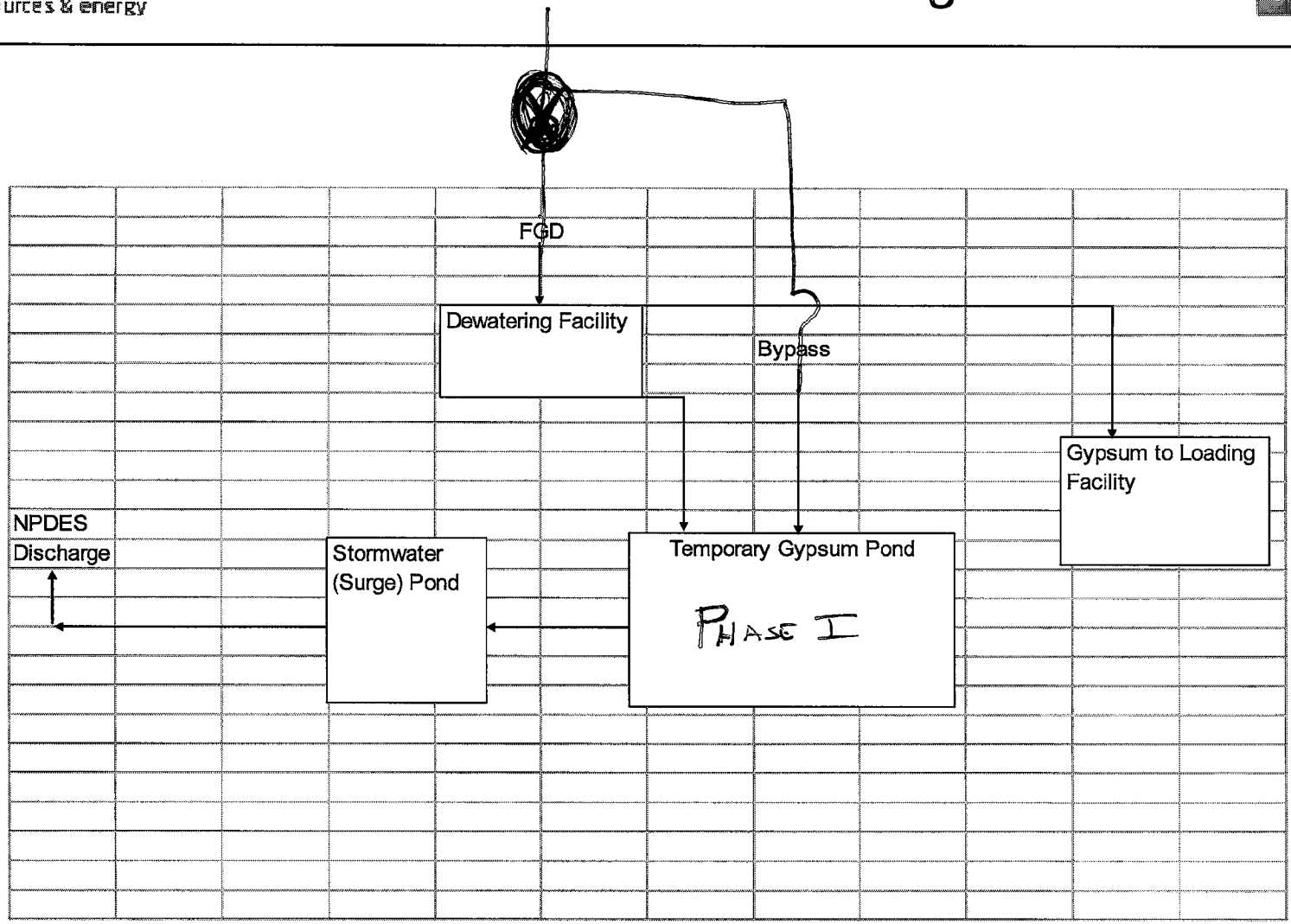

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Current Site Plan

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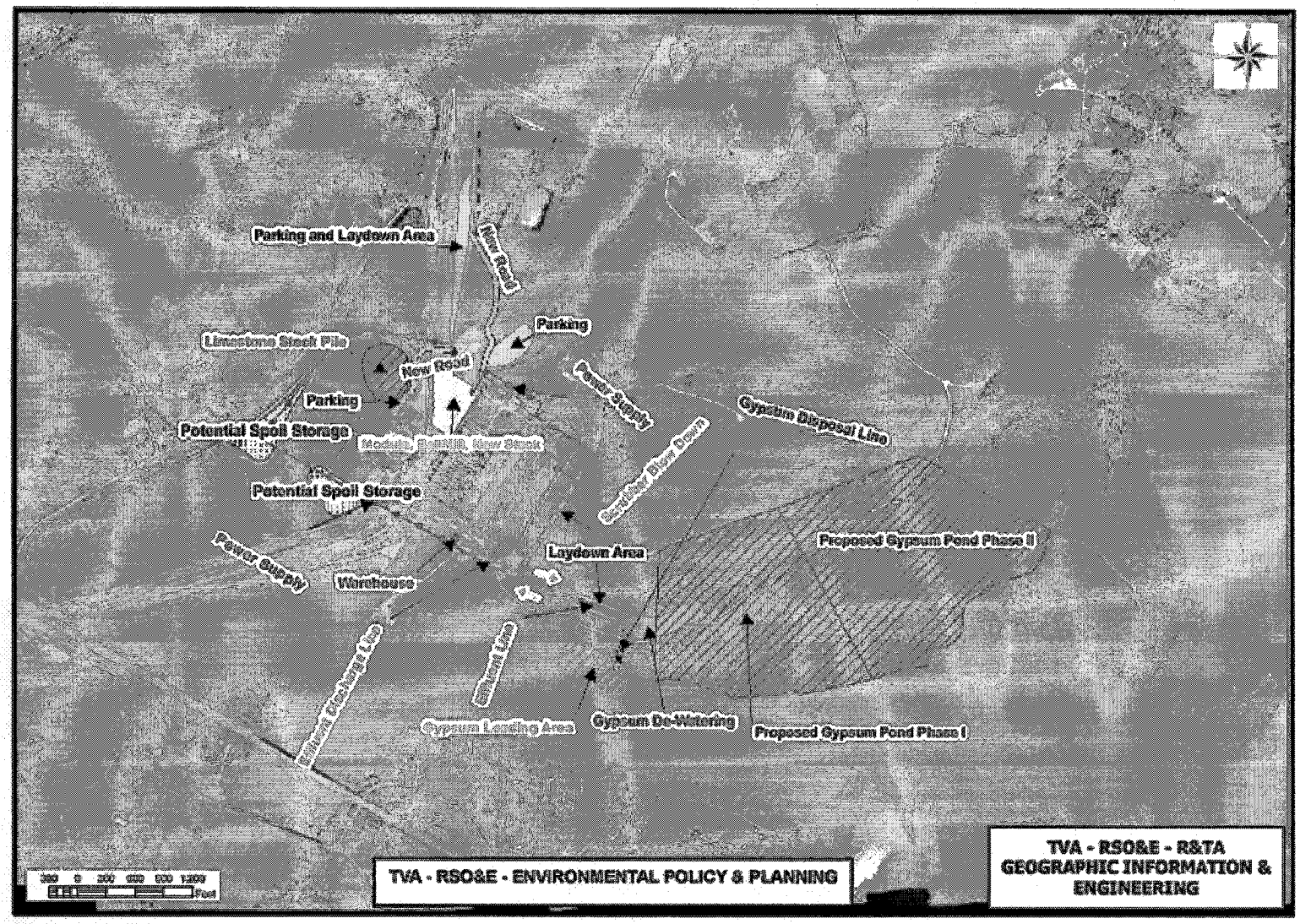

DRAFT 1 - AUGUST 29, 2005

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Phase 1 Gypsum Pond
Initial Grading

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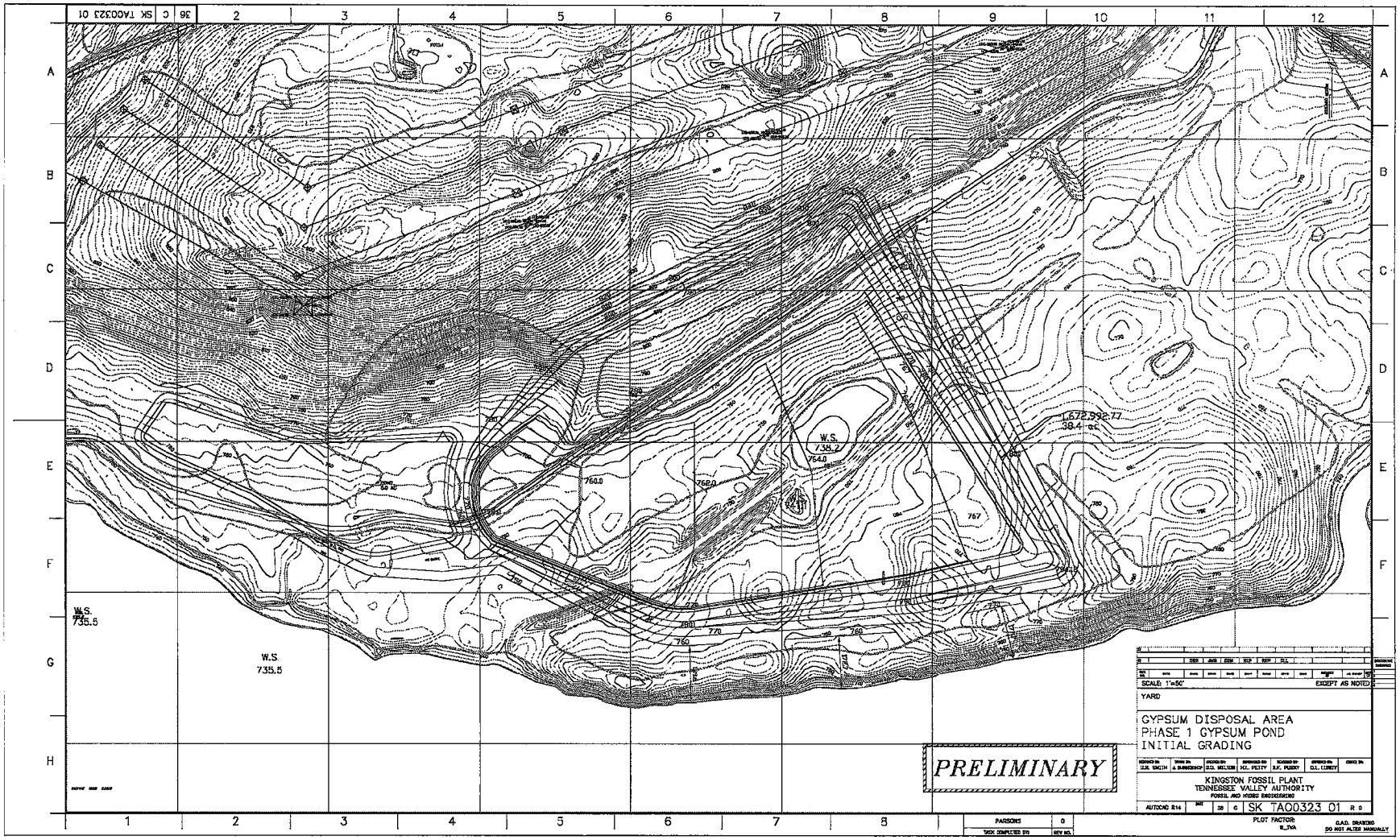

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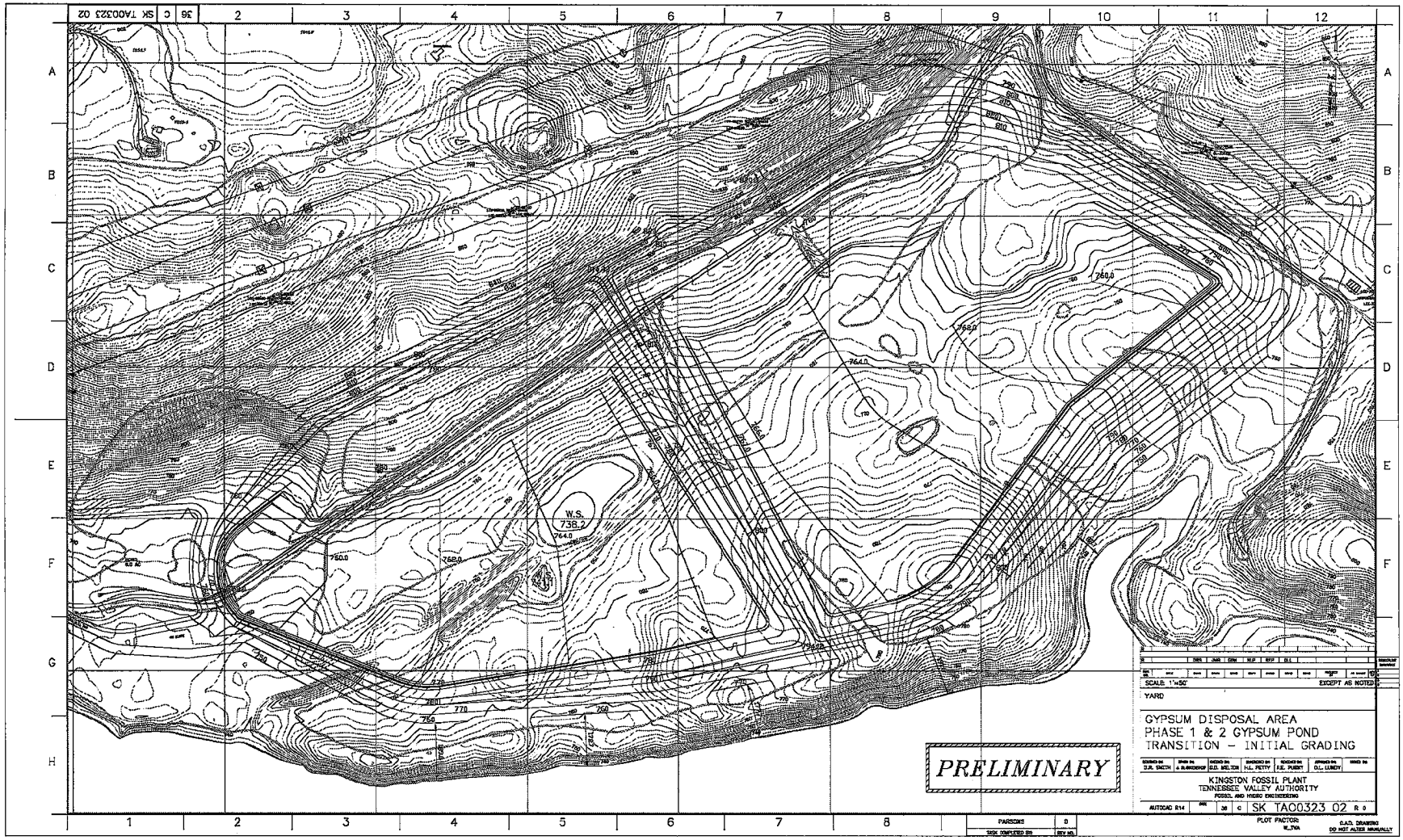
Phase 1 & 2 Gypsum Pond Transition Initial Grading



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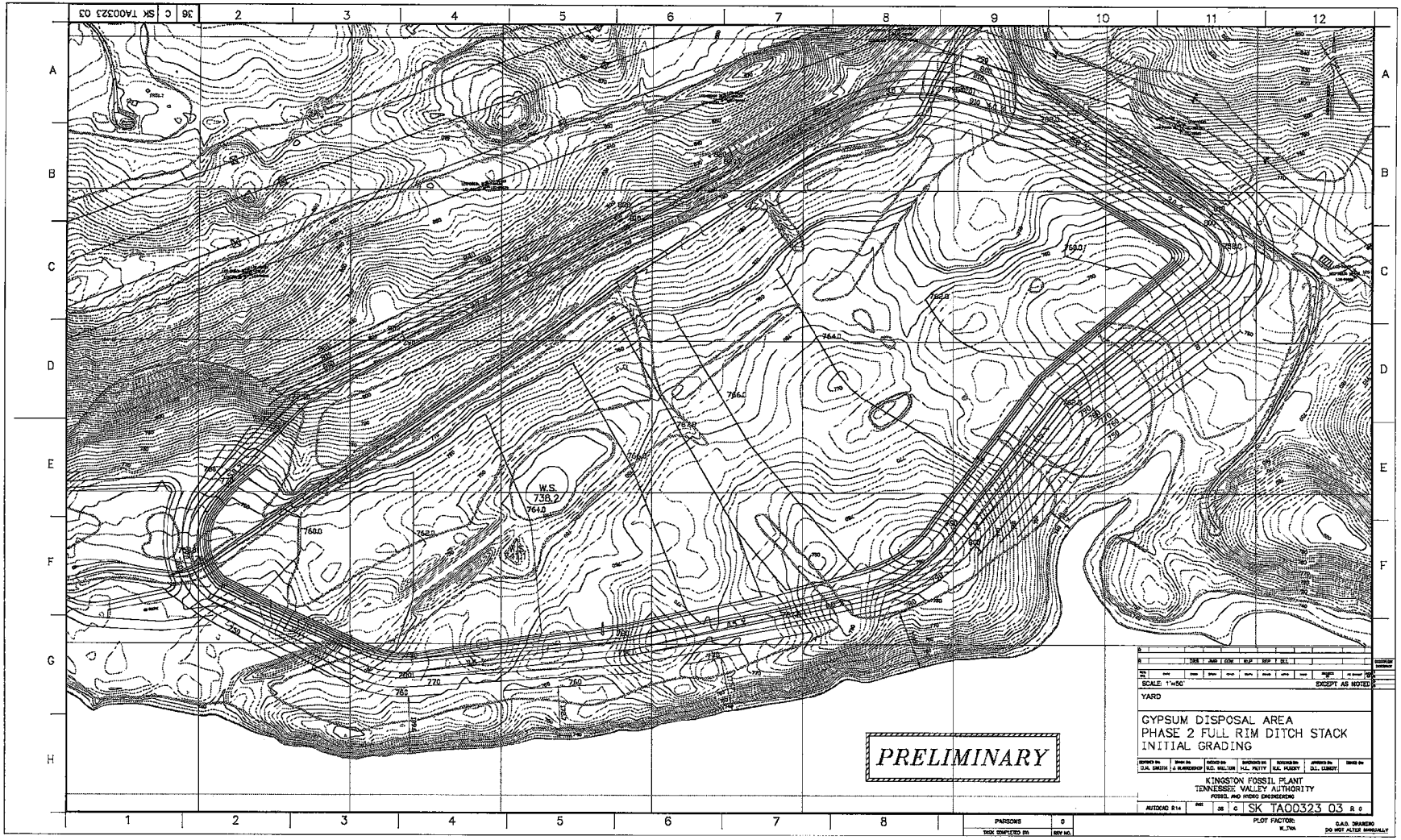
Phase 2 Full Rim Ditch Stack Initial Grading



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Phase 2 Full Rim Ditch Stack
Final Grading

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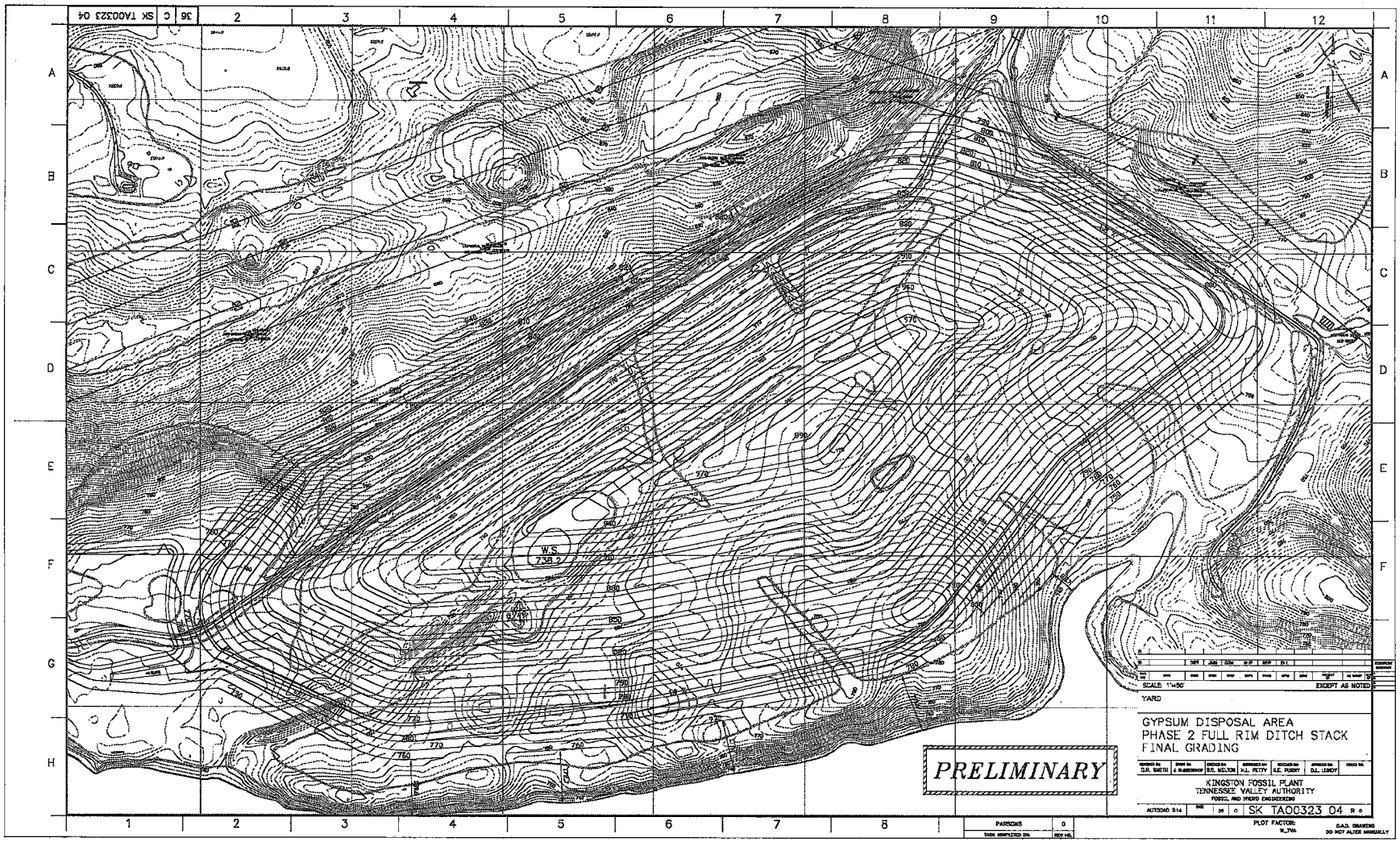

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Gypsum De-Watering Facility Layout

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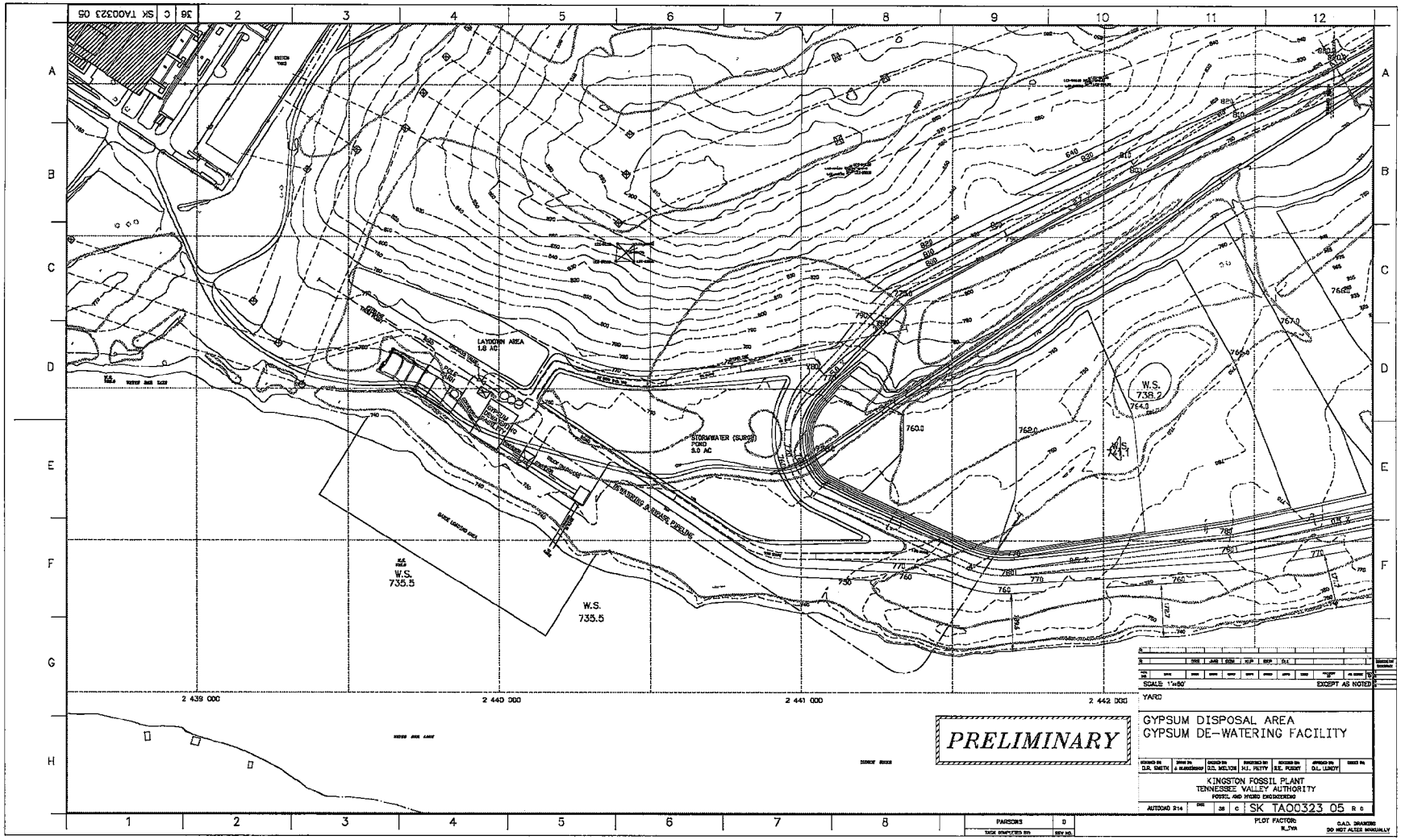

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Gypsum Storage/Disposal Preliminary Capacities

- Gypsum Pond
  - 2 years of full gypsum production
- Gypsum Rim Ditch Stack (assume 1.13 ton/cy @ 84 lb/cf density)
  - 11,781,700 cy capacity (airspace @ el 900)
  - Approximately 449,000 tpy (395,900 cy/y) gypsum for 3# coal
  - Approximately 742,000 tpy (654,300 cy/y) gypsum for 5# coal
- Projected Life for Wet Sluiced Rim Ditch Stack
  - 30 years at 3# coal (average production)
  - 18 years at 5# coal (average production)
- Additional capacity (dry disposal) is available (approximately 3 and 2 years for 3# and 5# coal respectively