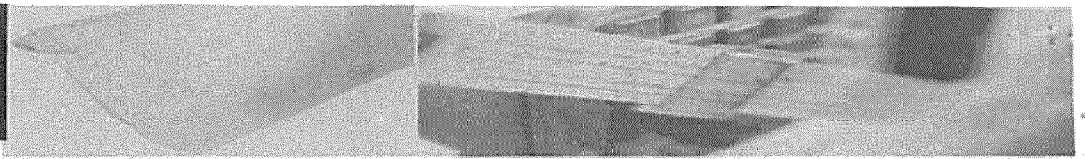
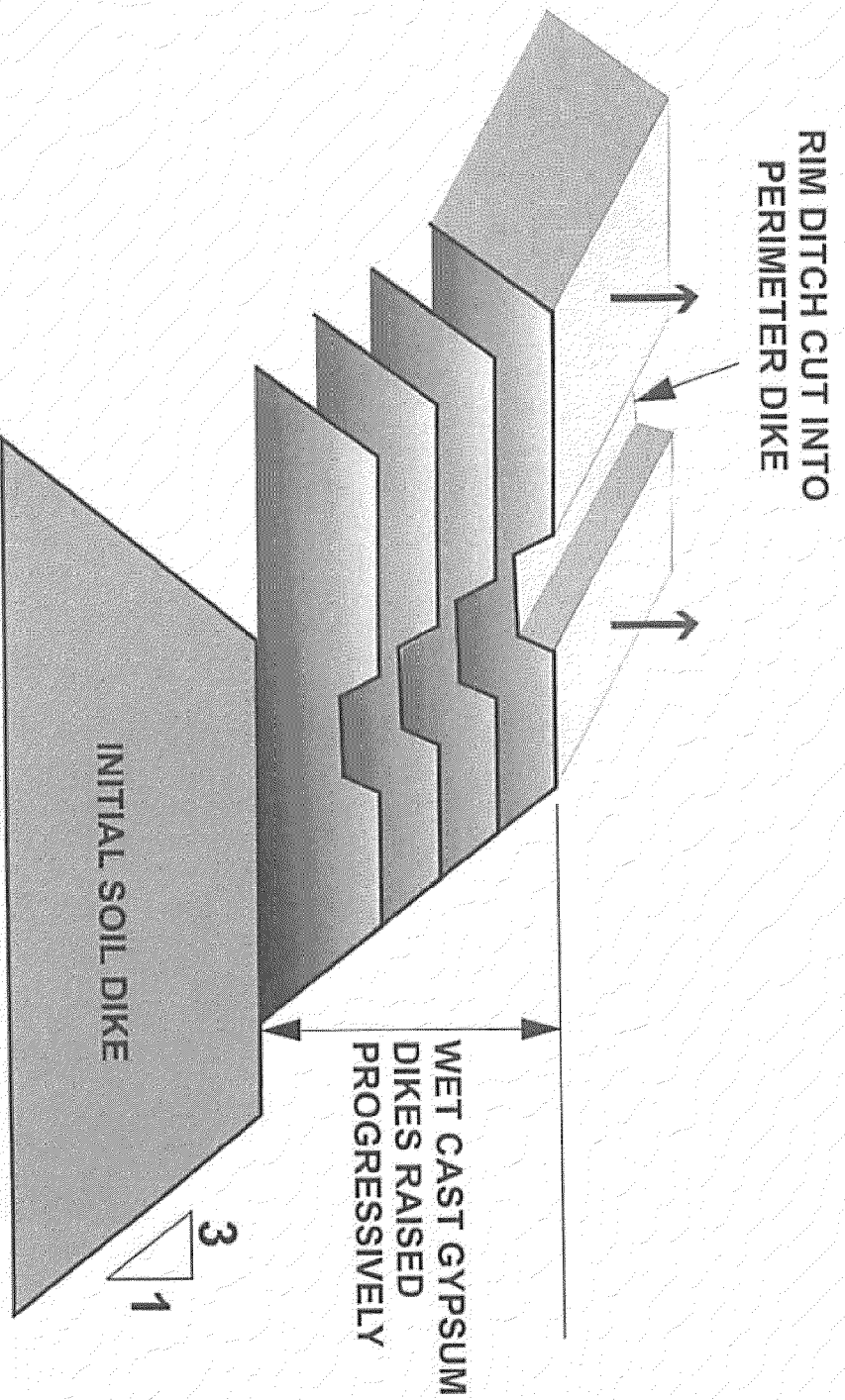
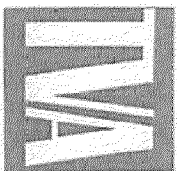
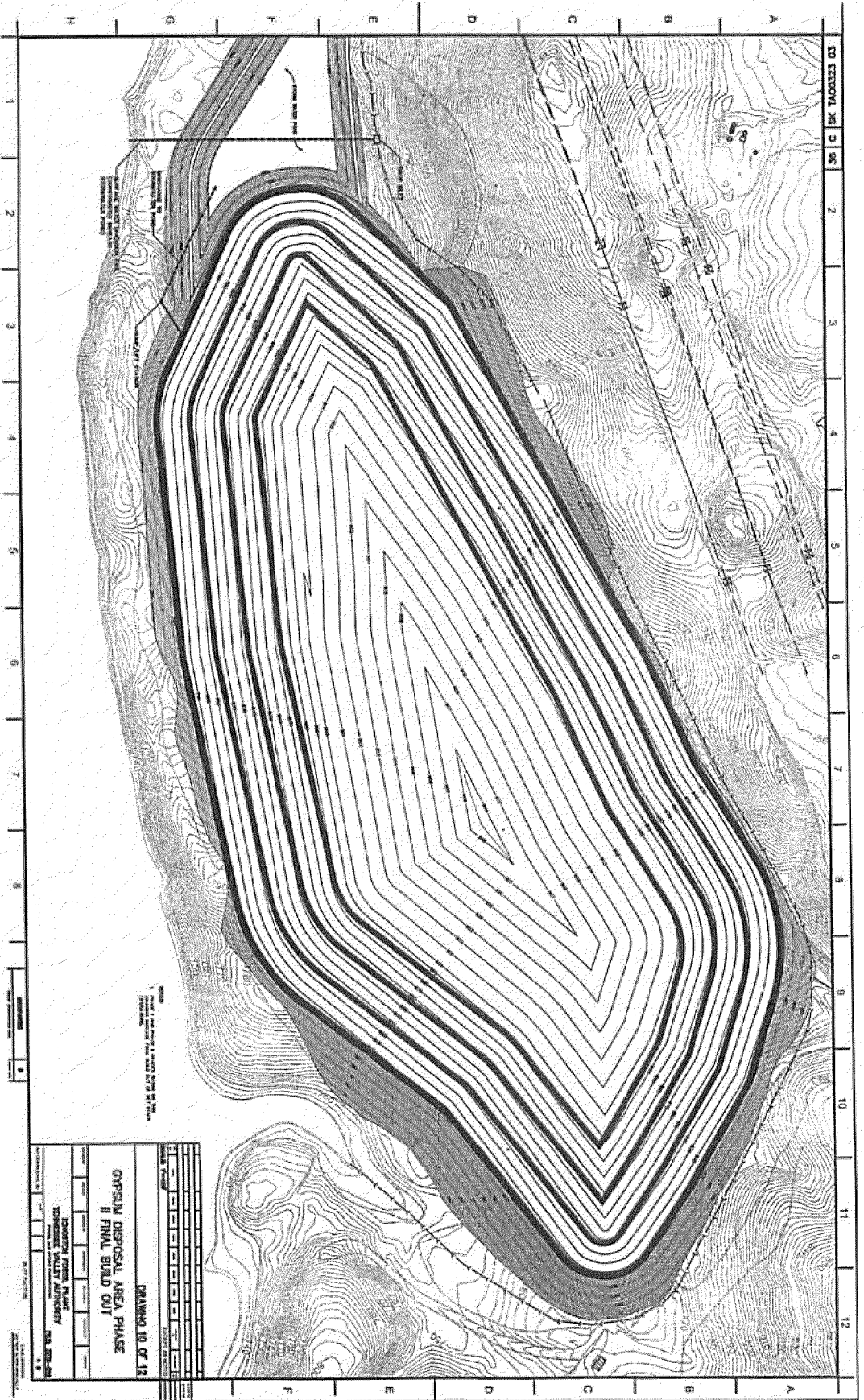


2.0 Scope of Work (Continued)

- Step 7 – Transition to Rim Ditch operation (if required).



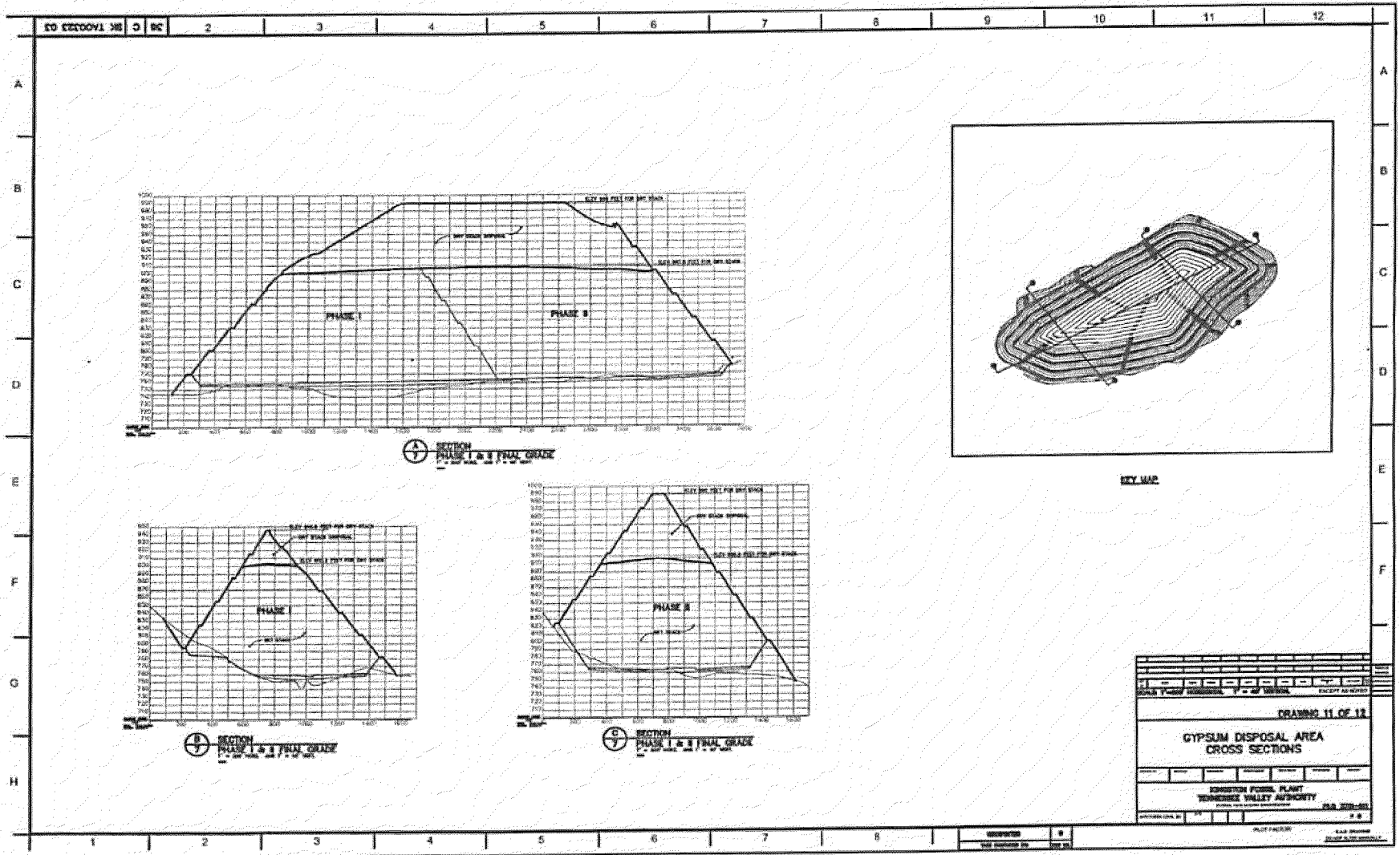
Completion of Wet Stack Operations



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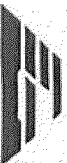
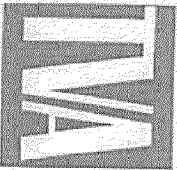
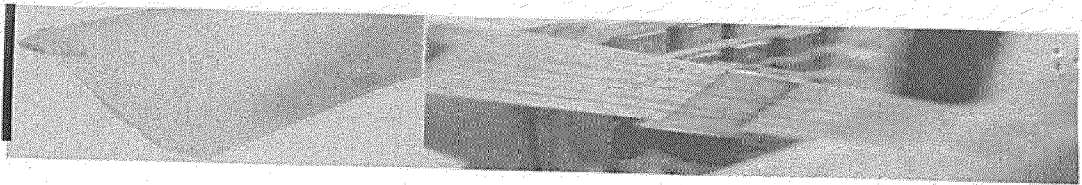


Cross Sections – Full Build-out



3.0 Assumptions/Limitations

- The design is developed sufficiently to develop quantities for a cost estimate
- No Karst mitigation program required
- Disposal facility designed to handle full bypass of gypsum from power generation operations
- Two-Phase design for maximum operational flexibility
- TDEC Solid Waste Permit application will address both Phases I and II
- Initial operations will consist of a wet pond operation (2 year capacity), with initial soil dikes being raised progressively by wet cast gypsum
- Operations may transition to Rim Ditch (if required)
- Wet stack operations to continue up to approximate elevation 900 ft MSL; additional dry stack capacity up to elevation 990 ft MSL



4.0 Environmental Impacts and Permits

- Solid Waste Permit in accordance with TDEC Rule 1200-1-7.
- U.S. Army Corps of Engineers 404 Permit for impacts due to construction within wetland areas and below ordinary high water.
- Aquatic Resources Alteration Permit (ARAP)/Section 401 Certification.
- A Stormwater Pollution Prevention Plan (SWPPP) revision will be required for construction activities.
- NPDES permit conditions must be addressed for the discharge from the stormwater pond. TVA currently plans to discharge stormwater through the existing outfall (plant discharge channel). TVA will pursue any permit modifications required.



5.0 Key Deliverables

- Permit drawings and a permit package for submission to TDEC.
- Permit drawings and a permit package for 404 Permit and ARAP.
- Detailed construction drawings and operations plan.
- Drawings and a DCN will be the deliverables for the completed design.



Other Items

- 6.0 Long Lead Materials
 - None identified
- 7.0 Cost Detail/Basis
 - Quantities provided for HED use
- 8.0 Schedule (upcoming milestones)
 - 50 Percent Design to be completed by April 15, 2006
 - Part II Permit Application submitted by May 15, 2006
 - ARAP/404 Permit Application submitted by June 1, 2006
 - See detailed project schedule.
- 9.0 Drawings
 - 12 Drawings (attached)

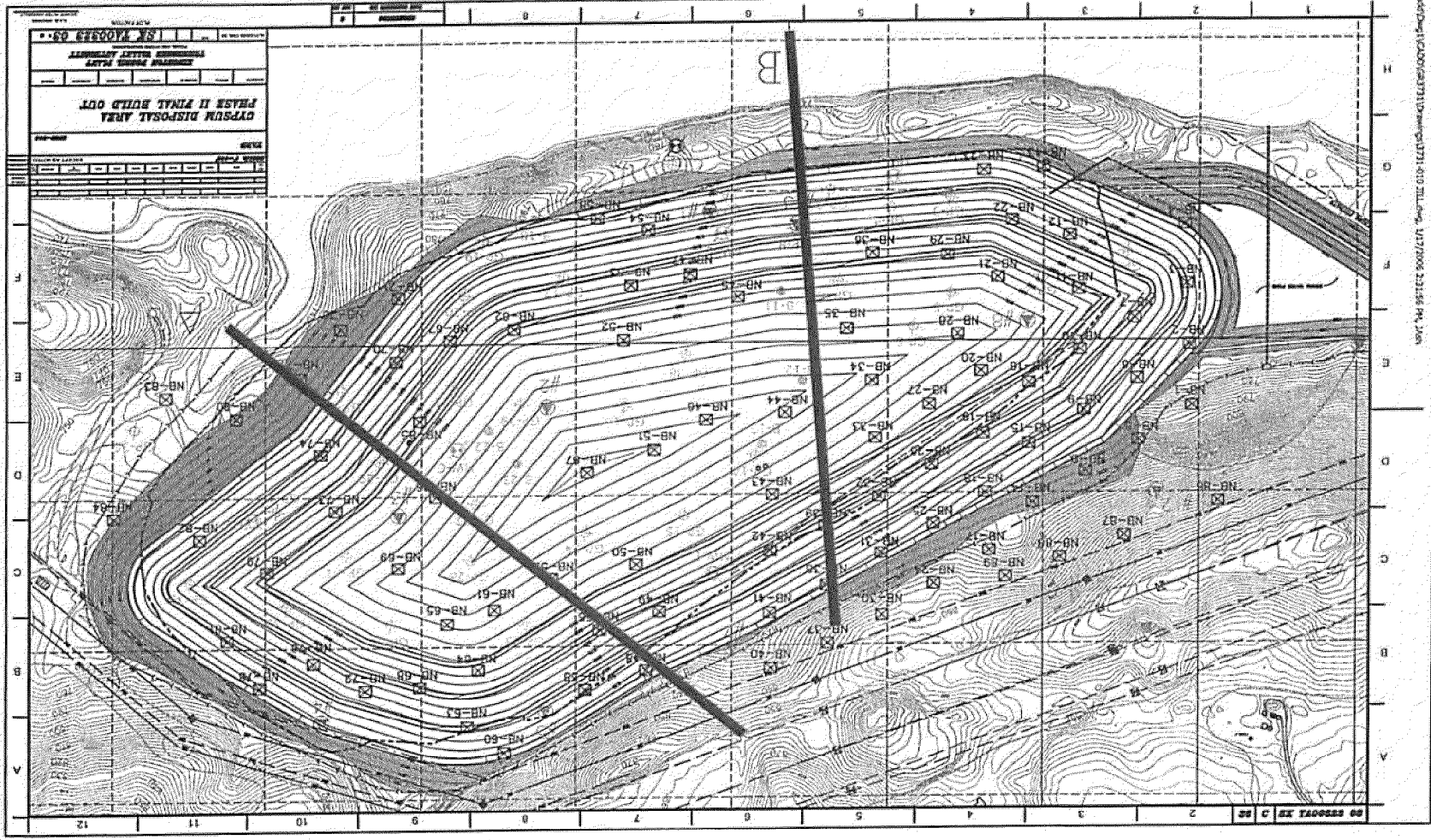
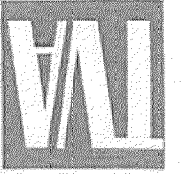


Content of Appendices

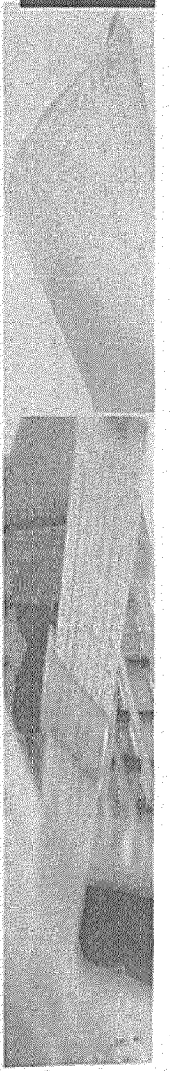
- Appendix A – Description of Initial Capital Project and Stack Operations
 - Contents of Appendix A have been addressed in this presentation

- Appendix B – Overview of Major Design Considerations
 - Waste generation (492,800 tons/yr based on 3.2 lb coal)
 - Site Hydrogeology – suitable
 - Slope Stability
 - Internal Drainage



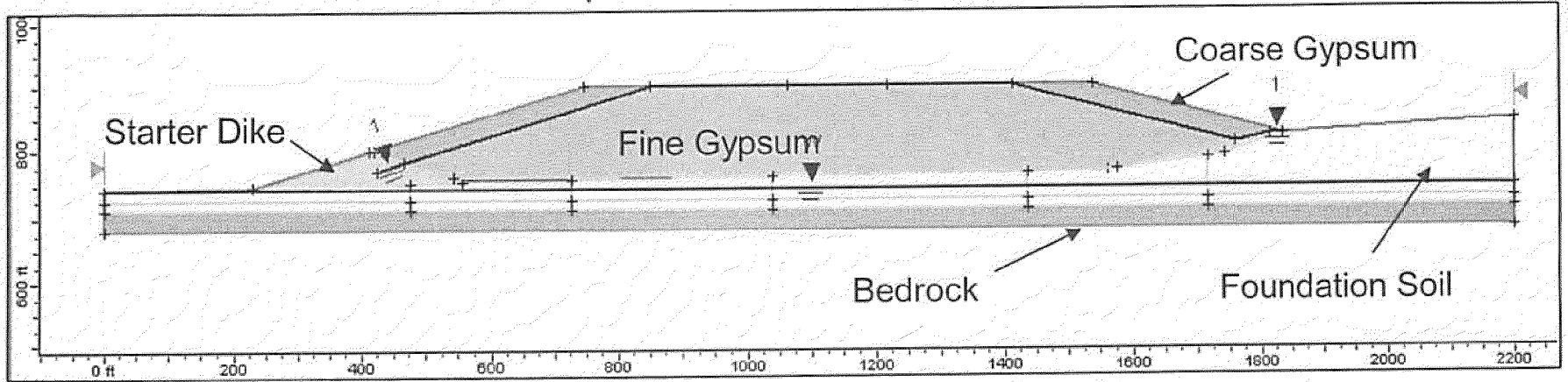


Appendix B - Slope Stability Critical Section Locations

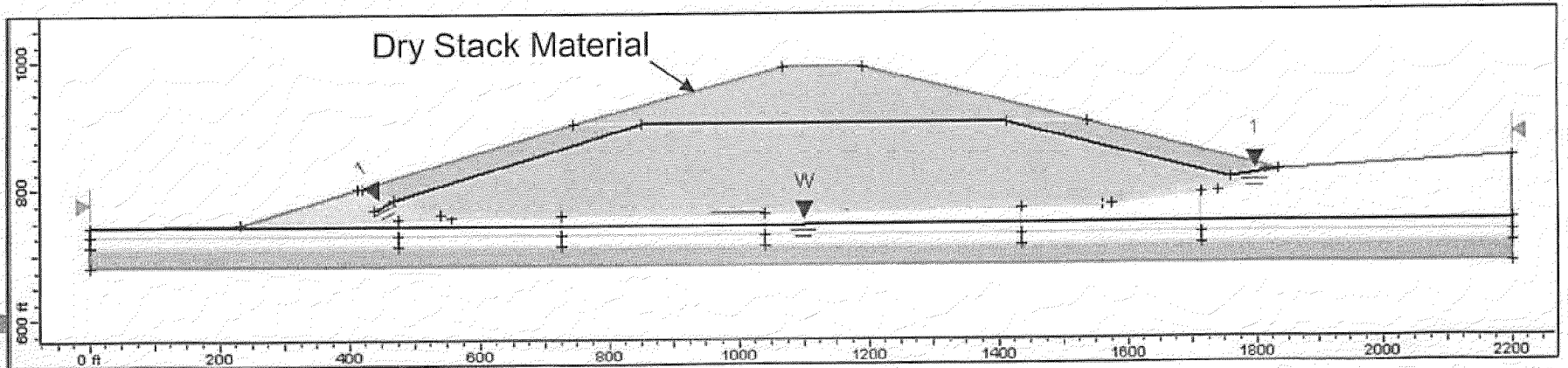


Cross-Section A

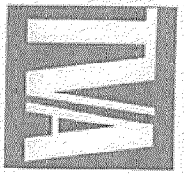
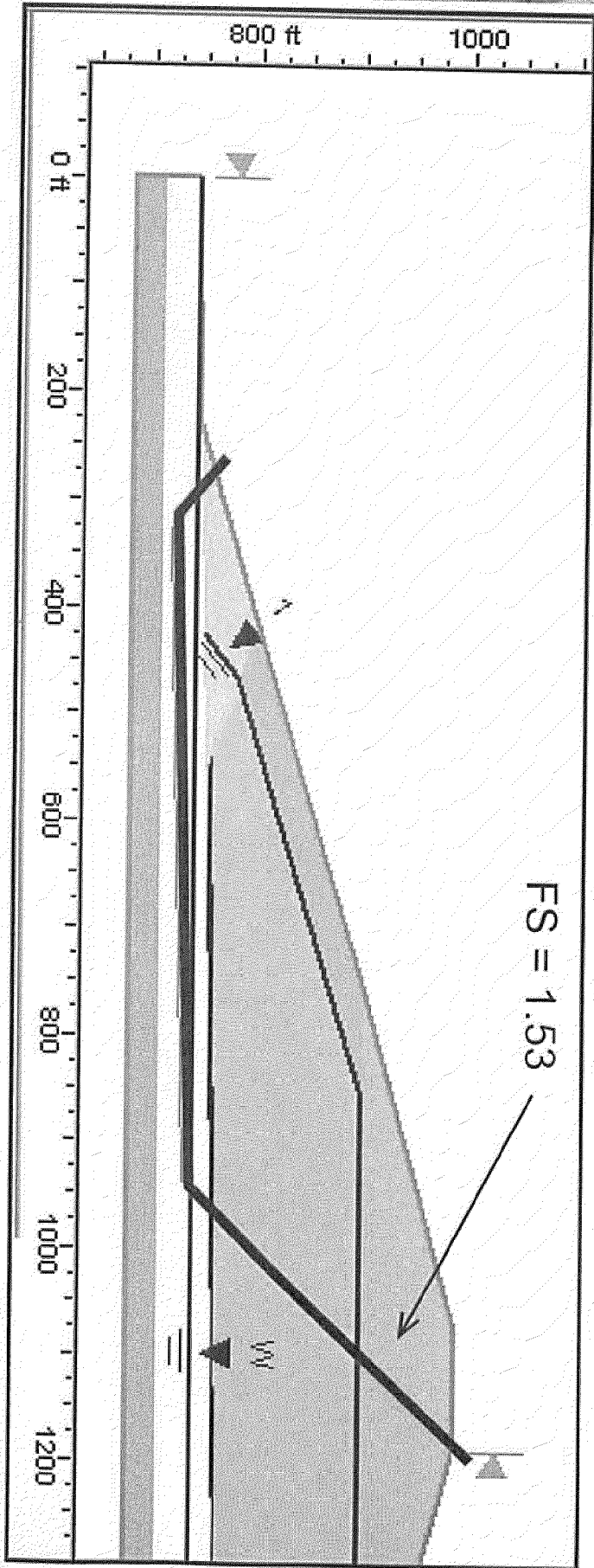
Top of Rim Ditch Operation

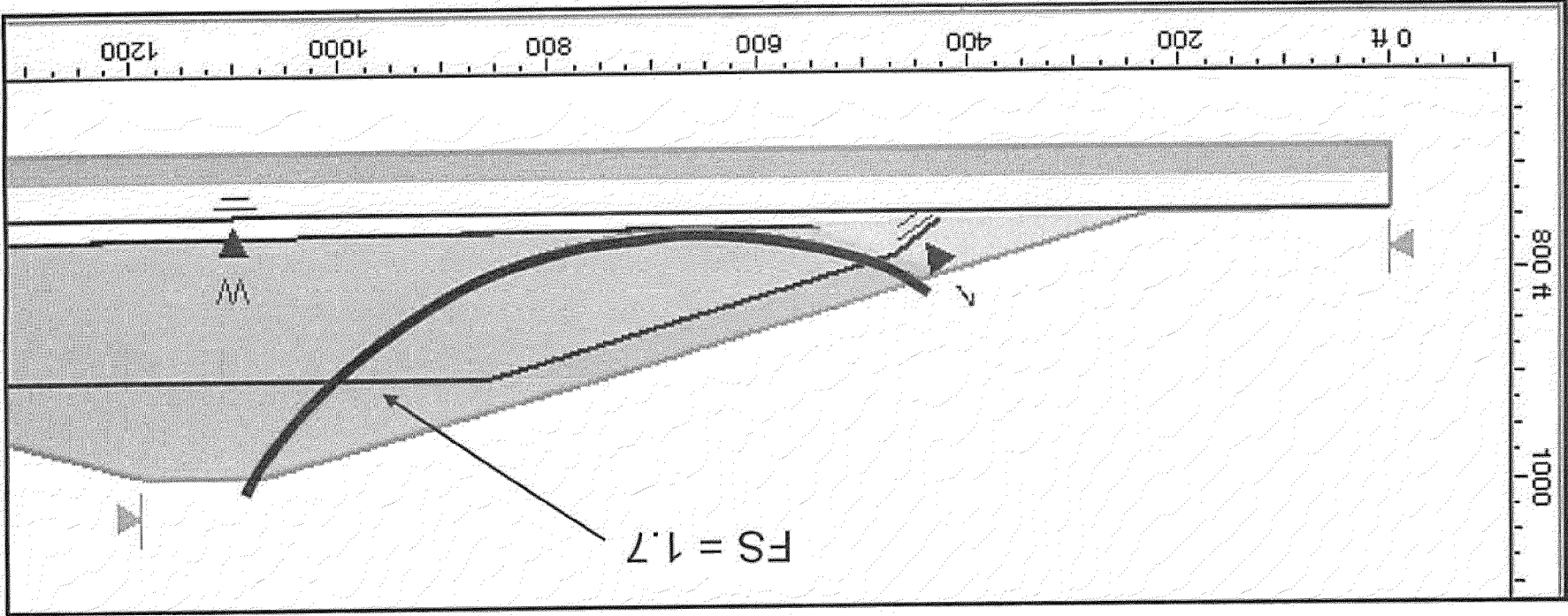


Top of Dry Stack Operation

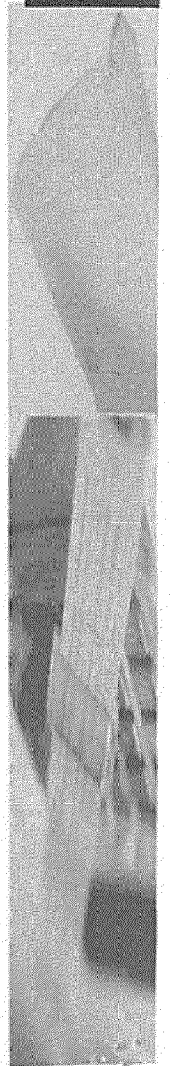


Short-term Analysis





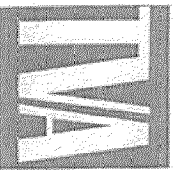
Long-term Analysis





Conclusions (slope stability)

- Analyses indicate gypsum stack is stable based on currently available data
- Additional data from MACTEC pending; analyses to be reviewed and refined once additional data has been received



Appendix B - Internal Drainage

- An evaluation has been performed to assess the need for an internal drainage layer (drainage blanket) placed above the geologic buffer. The evaluation considered the impacts on stability and the rate at which the water levels within the disposal area would drain both with and without a drainage layer.



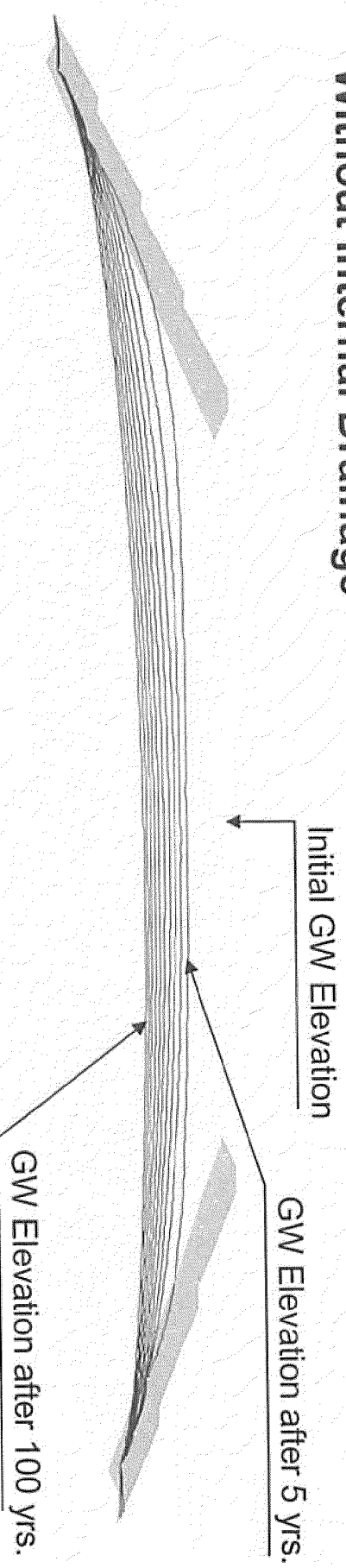
Appendix B - Internal Drainage (Cont.)

- It was concluded that an adequate factor of safety for stability could be obtained without the use of a drainage blanket.
- However, internal drainage is recommended and considered good practice for the following reasons:
 - Internal drainage will accelerate consolidation of the wet gypsum and will enhance the removal of liquids from within the gypsum stack. This will result in an increased factor of safety for slope stability (when compared to the undrained alternative).
 - Internal drainage will ultimately reduce the head on the liner (geologic buffer) resulting in less leakage of leachate and a reduced likelihood of activating any underlying karst features

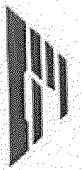
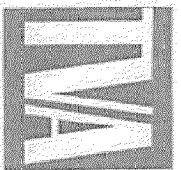
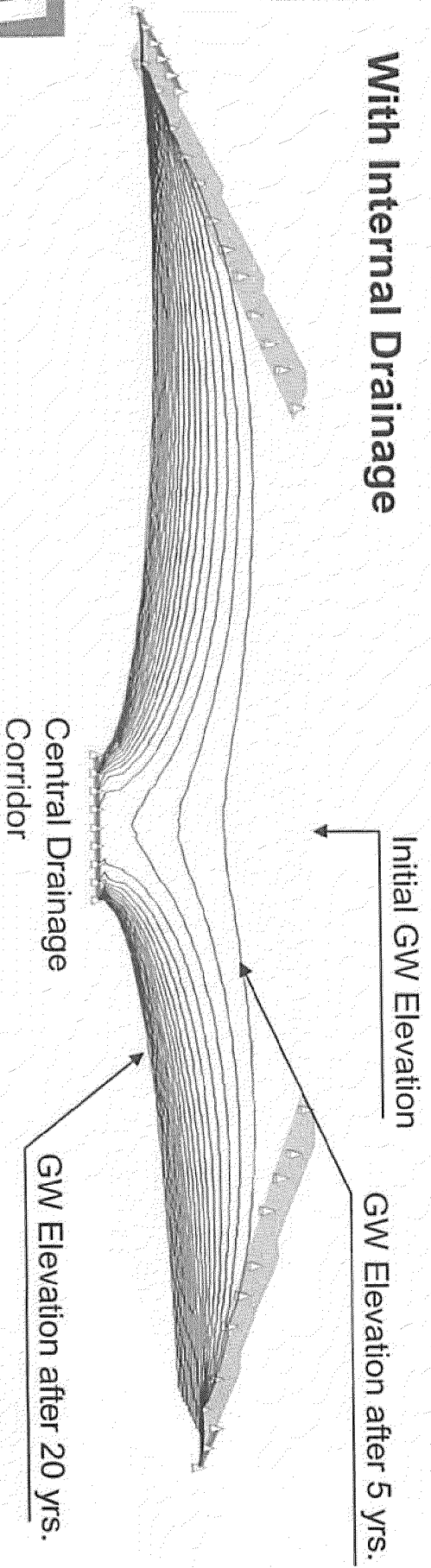


Appendix B - Internal Drainage (Cont.)

Without Internal Drainage



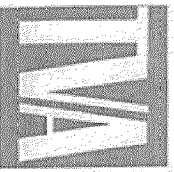
With Internal Drainage





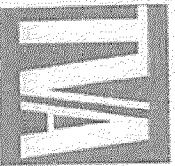
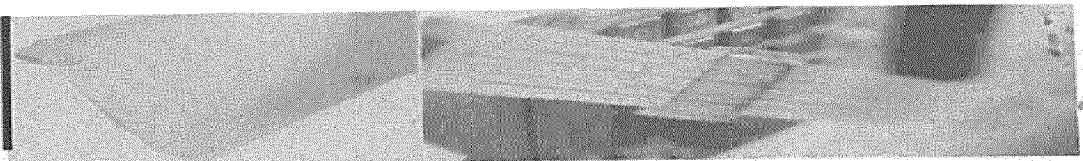
Appendix B - Internal Drainage (Cont.)

- ***Recommendation:***
 - Provide a 150 ft wide central drainage corridor (drainage blanket) along the axis of the facility; discharge leachate to a collection sump and pump to stormwater pond.



Appendix B – Stormwater Management

- A single stormwater sedimentation pond will be used
- Stormwater management system consists of:
 - Cover system benches (min. 1 percent slope)
 - Downdrains
 - Perimeter ditches
- Stormwater will be pumped from the stormwater pond to the plant's existing NPDES discharge point (plant discharge channel)



Closing

- Questions?

- Action Items

