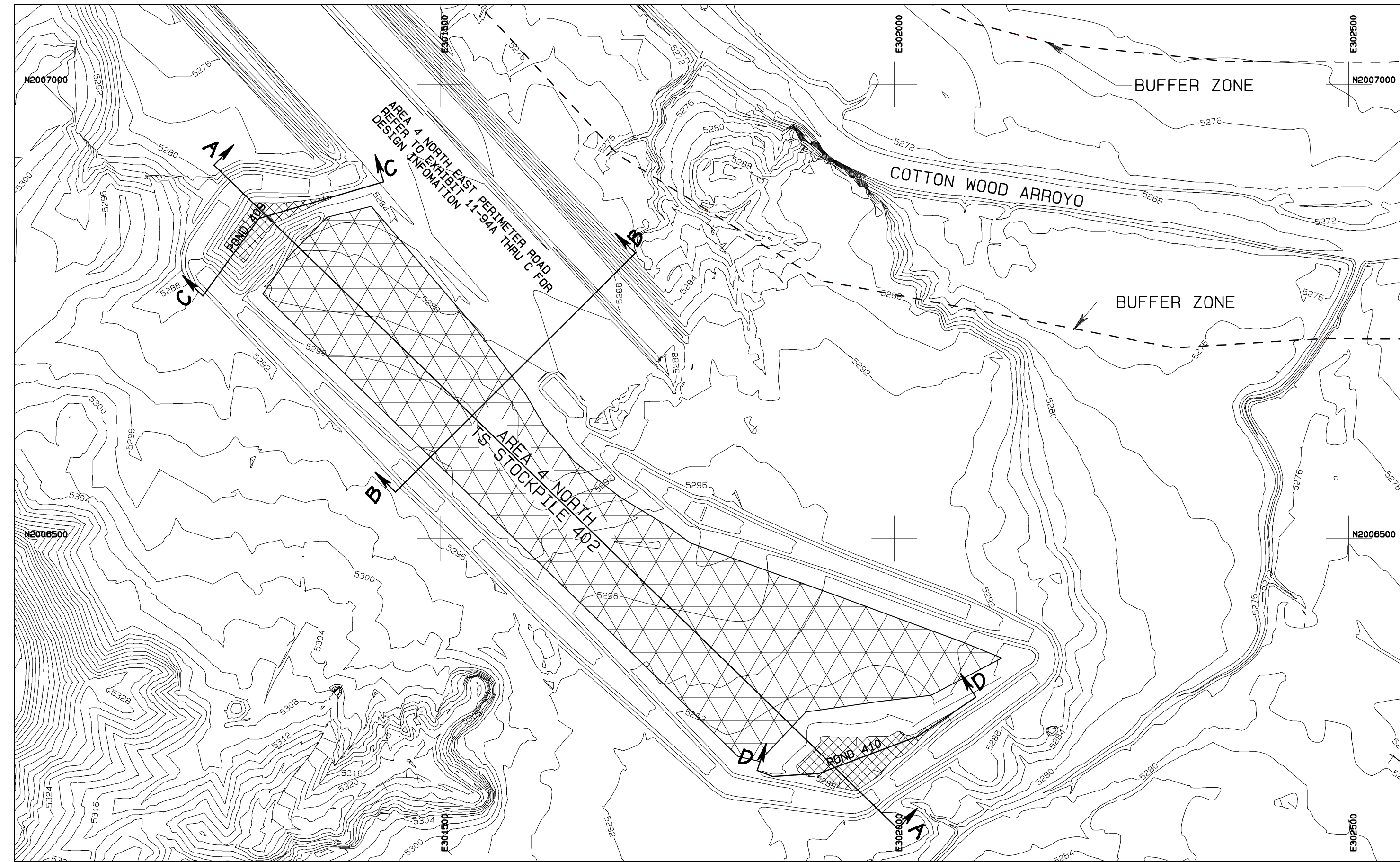




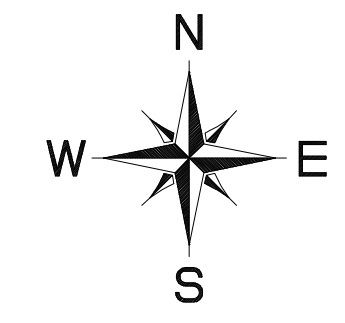




Project Desc.: Path: G:\NA\Permit\FCH\11-159\AN\159\_409-410\Design\PROJ\11-159\_409-410\Design.dwg Plot Date/Time: Tue Aug 9, 2011 / 9:32:26



PLAN VIEW  
1"=100'

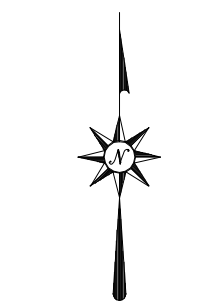
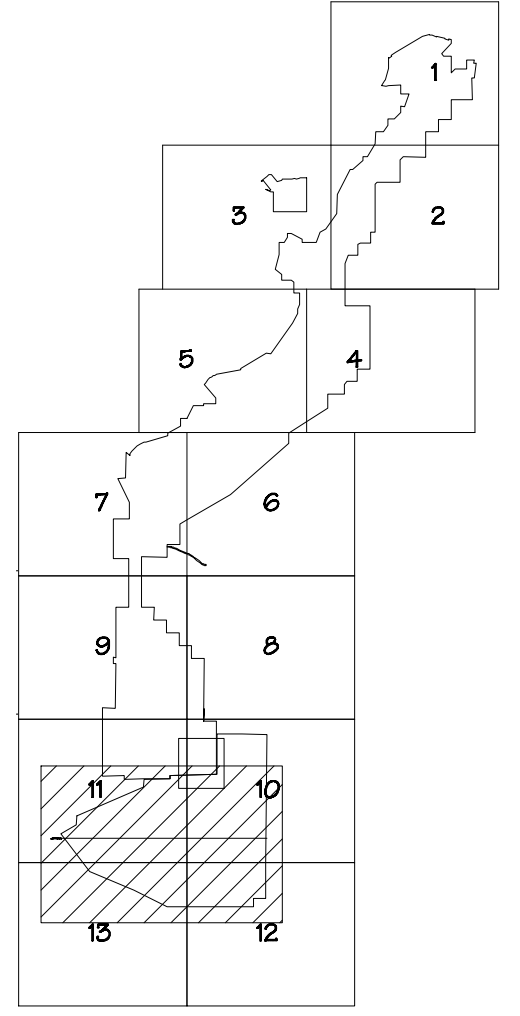


### LEGEND

	ROAD
	WATERSHED
	BUILDING
	FENCE
	IRRIGATION LINE
	CULVERT
	DAM
	DRAINAGE
	RAILROAD
	TREES
	POWERLINE
	SPOT ELEVATION
	INDEX CONTOUR
	INTERMEDIATE CONTOUR
	LEASE CORNER
	PERMIT/LEASE BOUNDARY

### NOTES

- For location of drainage control structures and watersheds, refer to Exhibit 11-13F.
- The hydrology and supporting design data for the drainage control structures are referenced on Table 11-5 of the NM PAP.



SCALE AS NOTED

#### STAGE STORAGE DATA FOR POND 409

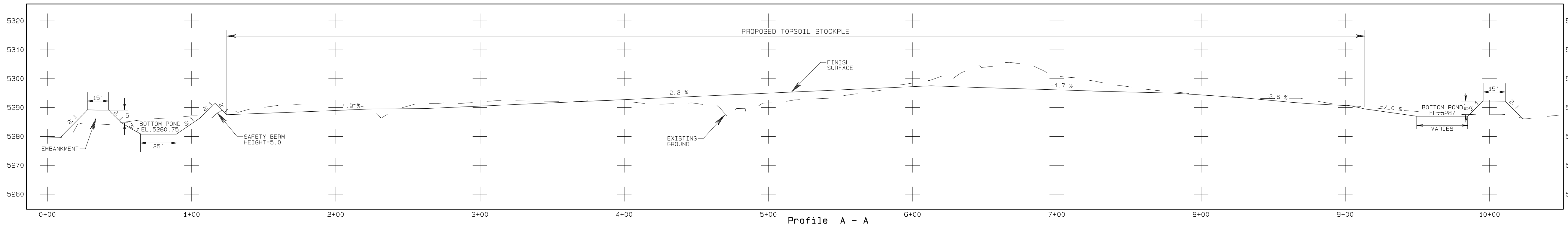
ELEV feet	AREA acres	VOLUME ac-ft	CUM. VOLUME ac-ft
5280.75	0.0	0.0	0.00
5281	0.04	0.0	0.0
5282	0.06	0.1	0.5
5283	0.08	0.1	0.13
5284	0.13	0.1	0.23

#### STAGE STORAGE DATA FOR POND 410

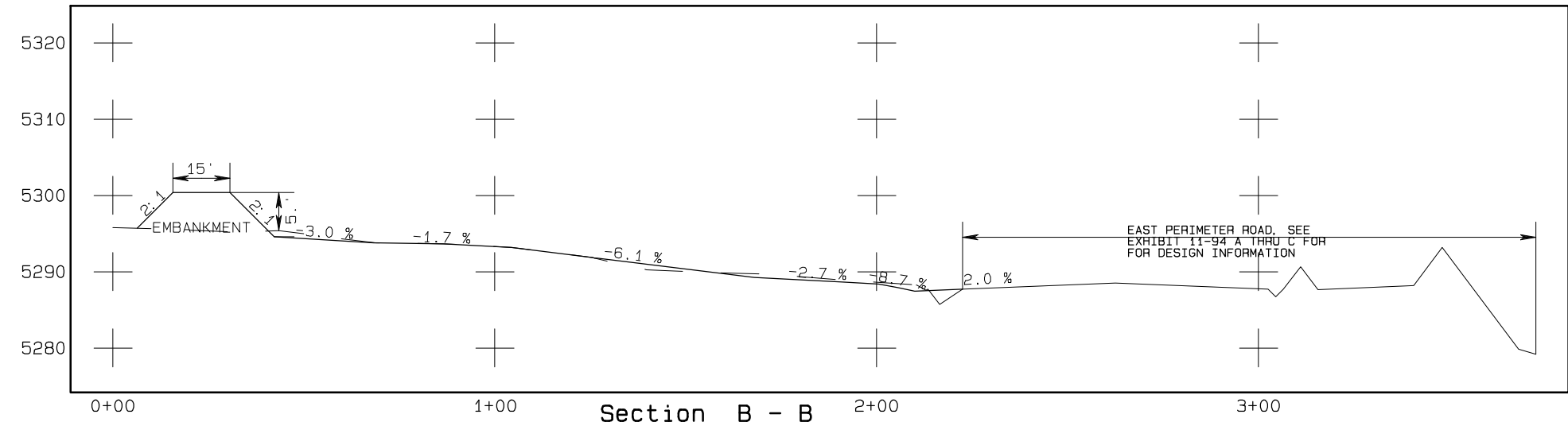
ELEV feet	AREA acres	VOLUME ac-ft	CUM. VOLUME ac-ft
5287	0.0	0.0	0.00
5288	0.12	0.1	0.1
5289	0.17	0.1	0.2
5290	0.26	0.2	0.4

#### CERTIFICATION STATEMENT

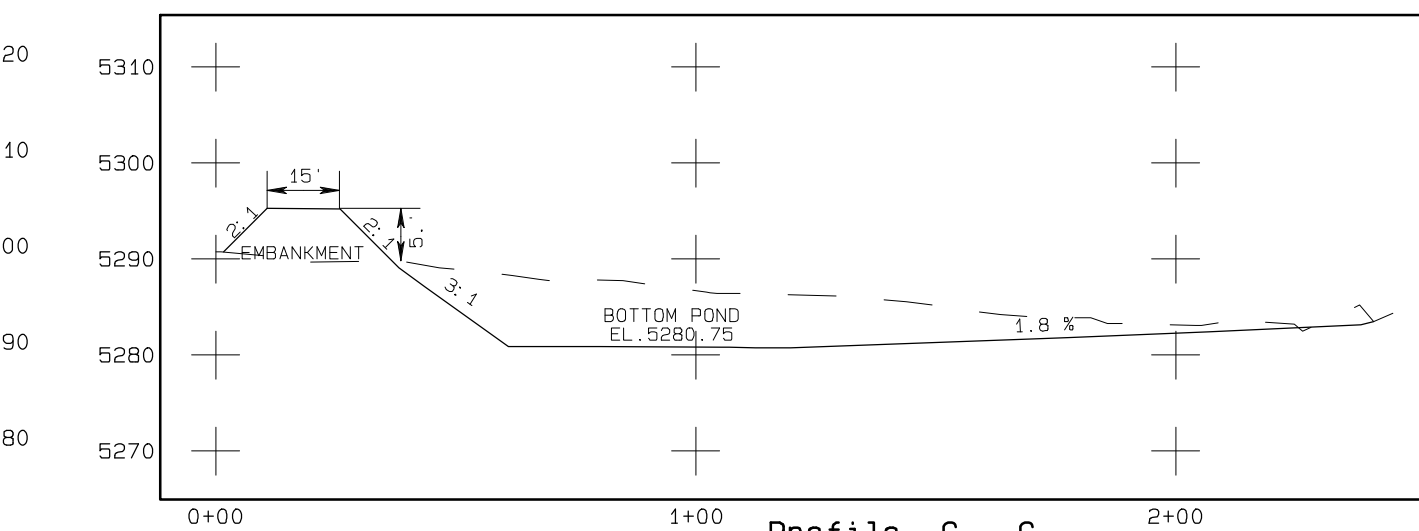
I, Leonard Raymond, hereby certify that this drawing was reviewed by me and that the information shown is complete and accurate to the best of my knowledge.



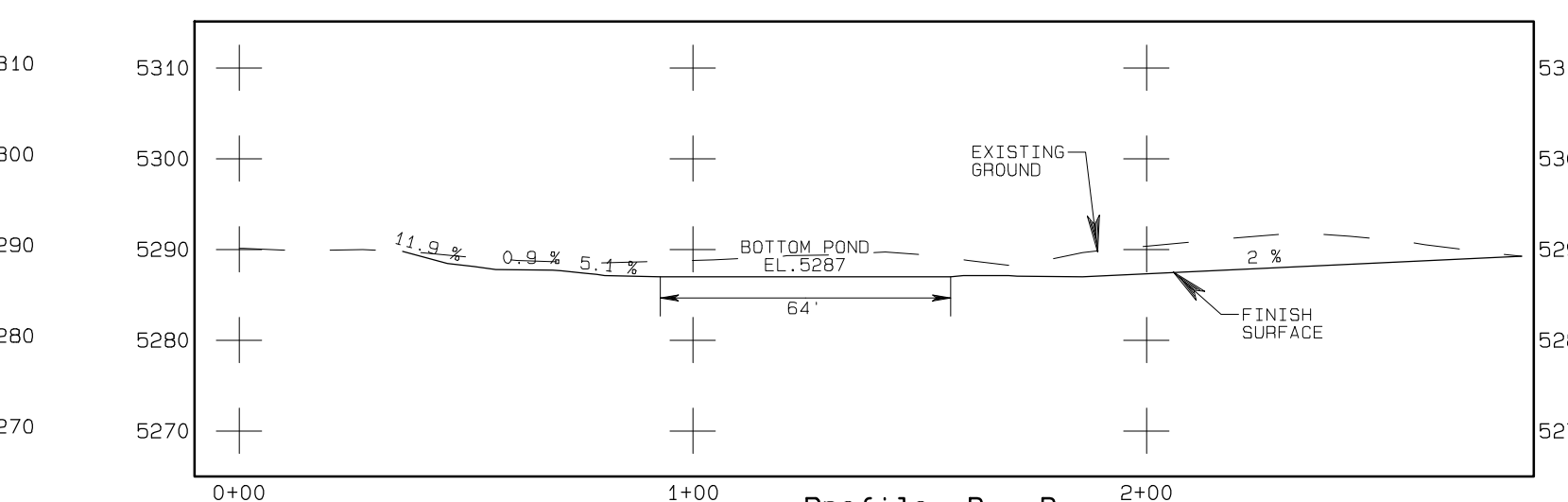
Profile A - A



Section B - B



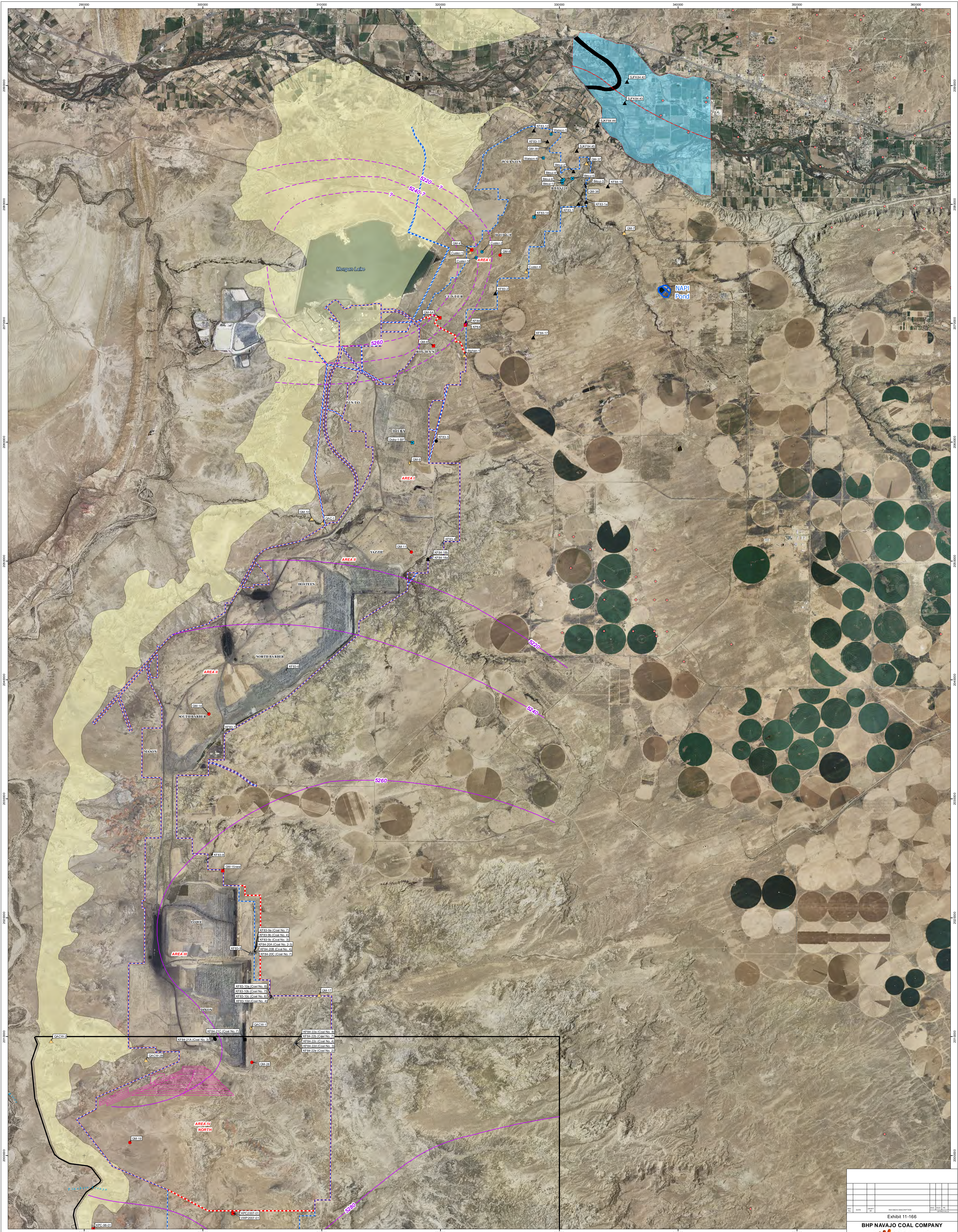
Profile C - C



Profile D - D

Above Cross Section and Profiles  
SCALE: Horizontal 1"=40'  
Vertical 1"=20'

DATE: 08/05/10  
REVISION: 1  
SUBMITTED TO CSR FOR APPROVAL: 2  
PROJECT MANAGER: FIS ENGR. OF RECORD: RCV REG. NO. 9803  
ENGR. OF RECORD: SHYVA OF RECORD: REG. NO.  
bhpbillion  
BHP NAVAJO COAL CO.  
NAVAJO MINE  
PS 880-1317, PUEBLO, NEW MEXICO 87130  
ACCOUNT: AUGUST 28, 2009  
DESIGNED BY: RY  
DRAWN BY: RY  
CHECKED BY: RY  
APPROVED BY: RY  
PLAN, PROFILE AND SECTIONS  
EXHIBIT 11-159D  
AREA 4 NORTH  
POND 409 AND 410  
Design  
DRAWING  
SHEET 1 OF 1



Coordinate System:  
NAD 1927 StatePlane New Mexico West FIPS 3003 Feet  
Units: US Feet

1:25,000

0 1000 2000 4000 6000 Feet

- Legend**
- Abandoned Abutment Monitoring Well
  - Existing Abutment Monitoring Well
  - No 1 Coal Monitoring Well
  - No 4-6 Coal Monitoring Well
  - No 7 Coal Monitoring Well
  - No 8 Coal Monitoring Well
  - Backfill Monitoring Well
  - OCB Monitoring Well
  - Flotation Well or Neutral Well
  - Abandoned PCS Monitoring Well
  - Existing PCS Monitoring Well
  - Nested Vibrating Wire Piezometer
  - Gas Wells
- PIT NAMES**
- BRCC Permit Area
  - BRCC Lease Area
  - Approved Coal Sublot
  - San Juan Alluvium above Flotation/Ferrous Overlap
  - Valley Length
  - PCS Potentiometric Contour - Inferred
  - Proposed OCB Formation Road
  - Approximate Coal Sublot
  - San Juan Alluvium above Flotation/Ferrous Overlap
  - Valley Length

Data Source:  
Aerial Photography (San Juan County) 2009  
NDEM/RM-19 Basemap 1998

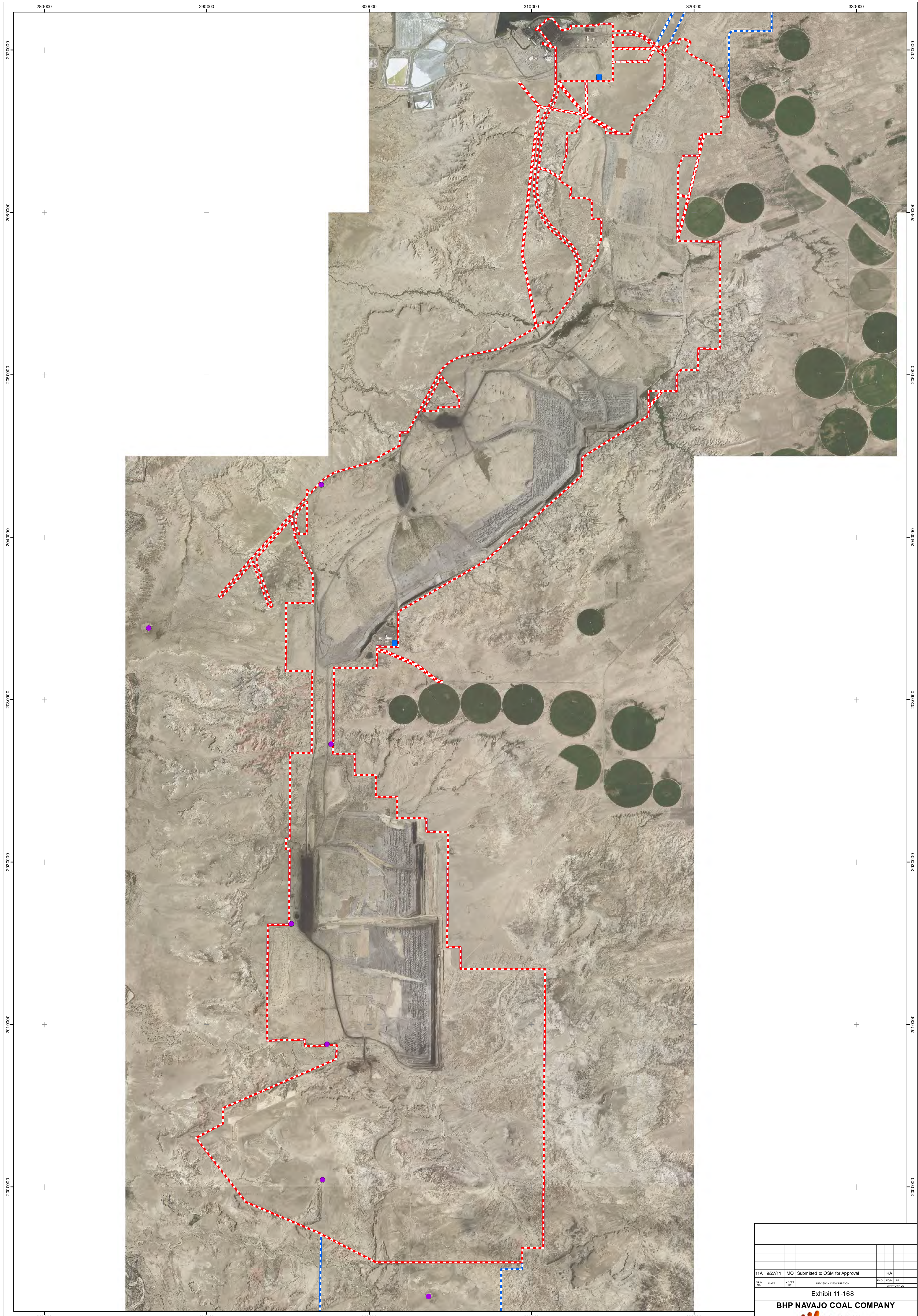
REV	DATE	BY	DESCRIPTION

Exhibit 11-166

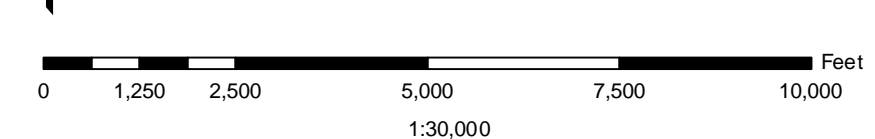
**BHP NAVAJO COAL COMPANY**  
bhpbilliton

**Navajo Mine Permit**  
Navajo Mine Pits  
with Monitoring Wells  
and PCS Potentiometric Surface

PREPARED BY: MD    DRAWN BY: MD    PAPER SIZE: ARCH E  
APPROVED BY: APO    DATE: 5/26/2011



Coordinate System: NAD 1927  
 StatePlane New Mexico West  
 Projection: Transverse Mercator  
 Datum: North American 1927  
 Units: Foot US



- Legend**
- Community Livestock Tanks
  - Potable Water Sources
  - SMCR Permit Boundary
  - BNCC Coal Lease

11A	9/27/11	MO	Submitted to OSM for Approval	KA
REV. NO.	DATE	DRAFT BY	REVISION DESCRIPTION	ENG. DES. BY DATE

Exhibit 11-168

**BHP NAVAJO COAL COMPANY**



P.O. BOX 1717 FRUITLAND, NEW MEXICO 87416/PHONE 505-598-3209/FAX 505-598-3361

**Navajo Mine**

Community Livestock Tanks  
and Potable Water Sources

PREPARED BY: SMS	DRAWN BY: SMS	PAPER SIZE: ARCH D
APPROVED BY: CKA	DATE: 9/27/2011	