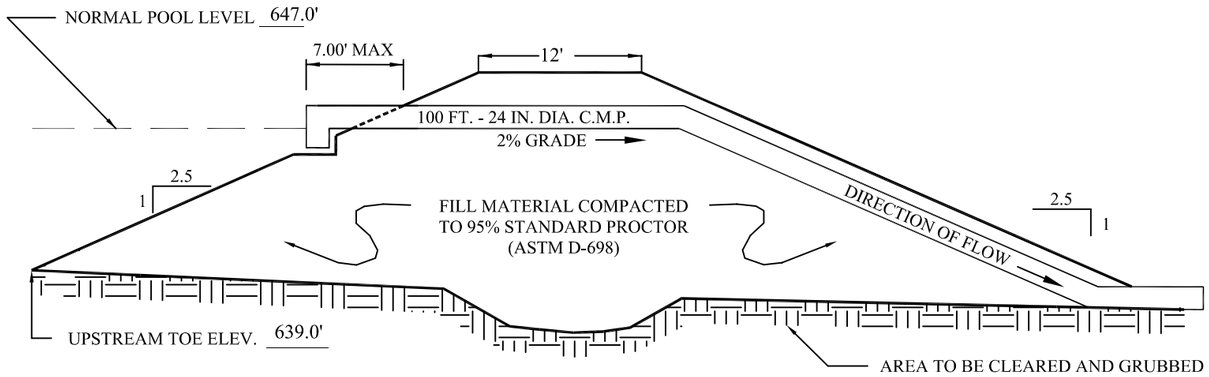
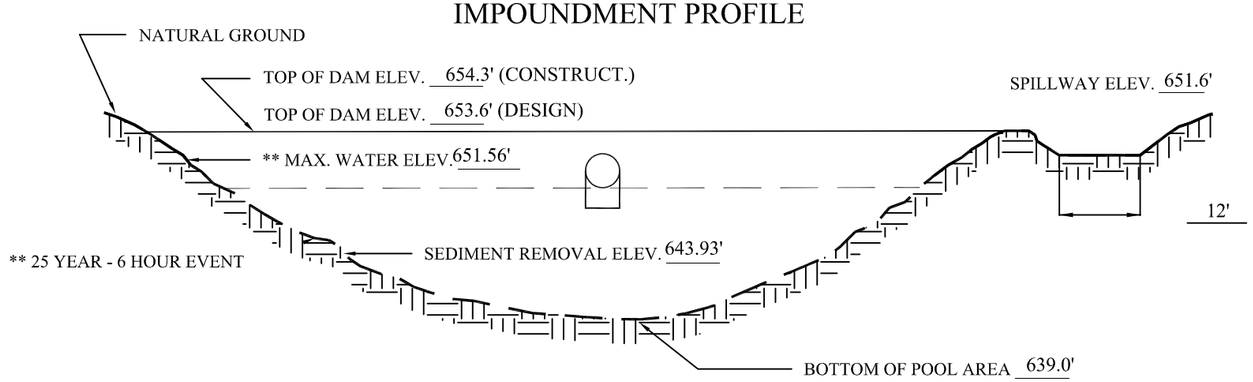
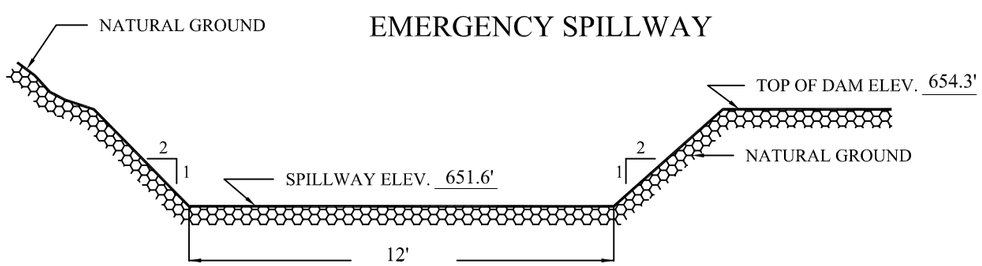
EMBANKMENT CROSS-SECTION



IMPOUNDMENT PROFILE



EMERGENCY SPILLWAY



EMERGENCY SPILLWAY TO BE GRASS LINED

MAXIMUM SPILLWAY GRADIENT 2.0 % (CONTROL SECTION)
MAXIMUM SPILLWAY GRADIENT 5.0 % (TAIL DITCH SECTION)
MINIMUM SPILLWAY GRADIENT 2.0 % (TAIL DITCH SECTION)

COMPANY: BIRMINGHAM COAL & COKE CO., INC.

MINE NAME: GOODEN CREEK #2 MINE

PERMIT #: P-3979

BASIN I.D. #: BASIN 141A

KEY BASIN PARAMETERS

DRAINAGE AREA	ACRES	37.0	
DISTURBED AREA	ACRES	5.14	
SEDIMENT STORAGE	AC.FT.	0.51	
DETENTION STORAGE	AC.FT.	0.99	
PERMANENT POOL CAPACITY	AC.FT.	1.50	
* TOTAL BASIN STORAGE CAPACITY .	AC.FT.	3.99	* 10 YEAR - 24 HOUR EVENT
** PEAK INFLOW	C.F.S.	91.44	** 25 YEAR - 6 HOUR EVENT
** PEAK OUTFLOW	C.F.S.	21.86	** 25 YEAR - 6 HOUR EVENT

STORAGE COMPUTATION

Elevation (feet)	Area (acres)	Avg. Area (acres)	Interval (feet)	Storage (ac. - ft)	Acc. Storage (ac. - ft)
640.0	0.055				0.0000
		0.173	5.0	0.865	
645.0	0.292				0.865
		0.487	5.0	2.435	
650.0	0.682				3.300
		0.939	5.0	4.695	
655.0	1.197				7.995
		1.488	5.0	7.440	
660.0	1.780				15.435

Birmingham Coal & Coke, Inc
Gooden Creek #2 Mine, P-3979
Basin 141A

SCALE:	DATE:	DRAWN BY:	APPROVED BY:
NTS	05/08/2014	JRW	J.R.W