



**LEGEND**

- ▭ SEDIMENT POND
- STUDY AREA
- - - PERMIT BOUNDARY
- DIVERSION
- MINE DITCH
- PIT BOUNDARY
- - - DISTURBANCE BOUNDARY
- WATERSHED BOUNDARY
- - - TIME OF CONCENTRATION
- STREAM CHANNEL
- ▭ SPGM STOCKPILE
- ▭ SOVB STOCKPILE
- ▭ OVB STOCKPILE
- SMALL AREA EXEMPTION BERM
- CULVERT
- ▭ CONCRETE ARCH BRIDGE
- ▭ HAUL ROAD
- ▭ ACCESS ROAD
- ▭ ROAD
- ▭ GRASS FILTER BMP
- ▭ STRAW WATTLE BMP
- 23 SECTION
- TOPOGRAPHY (5 FT. INTERVALS)

Runoff NRC S Type II 4.5 in. 100-Yr 24-Hr

	Area (ac)	Runoff Vol (acft)	RO Vol (yds3)	RO Vol (ft3)	Shape	Bottom Width (ft)	Top Width (ft)	Min. Height (ft)	SEDCAD Storage Height (ft)	Construction Storage Height (ft)	Minimum Free-board (ft)	Perimeter (ft)	Volume of Earthwork cut (cy)	Outside Berm (cy)	Storage (acft)
SPGM 9&10	6.329	6.8	10971	296,208	Trap (3:1)	12	42.00	5	4.5	5	0.5	2019	10095	5608	5.3
OVB-1	26.7	26.7	43076	1,163,052	Trap (3:1)	32	62.00	5	4.5	5	0.5	5907.5	51417	16410	27.8
SPGM 13	2.57	2.57	4146	111,949	Trap (3:1)	12	42.00	5	4.5	5	0.5	1314	6570	3650	3.5
SOVB-10	5.42	5.42	8744	236,095	Trap (3:1)	12	42.00	5	4.5	5	0.5	2100	10500	5833	5.5
Explosives Storage Pad	3.56	3.56	5743	155,074	Trap (3:1)	12	42.00	5	4.5	5	0.5	1588	7940	4411	4.2

REV	DATE	DES	COMPLETENESS COMMENT	JLS	CWB	JRH			
			REVISION DESCRIPTION	CADD	CHK	RWW			
PROJECT									
SOUTH HEART COAL LLC SOUTH HEART LIGNITE MINE SOUTH HEART, NORTH DAKOTA									
<b>SMALL AREA EXEMPTIONS - STOCKPILE CONTAINMENT DESIGNS</b>									
PROJECT No.		23-428403		FILE No.		Ponds & Ditches.dwg			
DESIGN	APO	2/15/10	SCALE	AS SHOWN	REV.	1			
CADD	JLS	2/15/10	<div style="display: flex; align-items: center;"> <div> <p>Figure 3.6-8</p> </div> </div>						
CHECK	JRH	2/15/10							
REVIEW	JRH	2/15/10							